D D Kosambi: The Scholar and the Man

MEERA KOSAMBI

D D Kosambi enjoys a unique international identity as a brilliant, profound and original scholar who straddled many fields of knowledge where he made multiple scholarly contributions. This essay outlines the vastness of his intellectual canvas, provides a short biographical sketch and also describes some facets of a fascinating personality.

some have greatness thrust upon them, and some have expectations of greatness thrust upon them – as do I, being a third-generation Kosambi. All my academic life has been a struggle to live up to the iconic name that locates me immediately within an intellectual context in any academic circle in the world. I will mention just one telling incident that happened during my first visit to Columbia University in the early 1980s. I was then based at Rutgers University, New Jersey, as visiting research faculty in urban studies and paid a courtesy call on Ainsley Embree who was chair of Asian studies at Columbia. After establishing my ancestry, he took me around and introduced me to the other faculty members, saying: "This is Dr Kosambi, and yes, she is". This last was in response to the unasked question immediately apparent on everybody's face: "Is she the daughter of ...?" It is not an easy task to lay claim to this intellectual heritage.

This is therefore not a critical analysis of D D Kosambi's multiple intellectual contributions to a wide range of academic disciplines. There are scholars far better equipped to do so, in any one of the fields of his intellectual activity (while I do not have expertise in any of them). What I would like to do is to indicate the amazingly wide range and scope of this activity. Kosambi has often been described as a genius, a "Renaissance man", a towering intellectual giant and I myself would not have believed that such a man existed if I had not seen him at close quarters. Here I will only attempt to outline the vastness of his intellectual canvas, prefacing it with a short biographical sketch and end by touching upon some facets of his personality. The first two sections are inevitably drawn largely from secondary sources, given my lack of adequate intellectual credentials and Kosambi's general unwillingness to share personal reminiscences or work-related matters with his family.

1

D D Kosambi was born on July 31, 1907 in a Gaud Saraswat brahmin family of Goa where he spent his first few years, speaking Konkani as his mother tongue. He had his early schooling in Pune where his father, Acharya Dharmanand Kosambi, a pioneering "Buddhist scholar of Buddhist studies", was then based, teaching Pali at Fergusson College.¹ Dharmanand had already been invited once as visiting faculty to Harvard University, to work on some Pali Buddhist texts. On his second visit to Harvard in 1918, he took along his oldest daughter, 19-year-old Manik, and his 11-year-old son Damodar, known to all by his nickname "Baba", leaving the two younger daughters with their mother in Goa. Actually, Manik was to go alone with him and Baba was to be kept in a hostel in Pune for his schooling. But his poor health made this impracticable and he was taken along too. Manik was enrolled in Radcliffe College

Meera Kosambi (mkosambi@pn2.vsnl.net.in) is a sociologist who specialises in urban sociology and women's studies.

which was then a woman's college (affiliated to Harvard which was a men's college) and Baba in the Cambridge Grammar School and later the Cambridge Latin School. After four years, when Manik graduated from Radcliffe, Dharmanand returned to India with her; Baba stayed behind alone in a hostel until he finished school in 1924. (Dharmanand provided money for his expenses; additionally Baba did summer jobs working on farms and in orchards.) Then he spent a year in India with his parents and Dharmanand tried to enrol him in a college in India. But that proved difficult because of the different educational systems and Dharmanand took Baba back and enrolled him in Harvard College in January 1926.

In addition to his studies, Baba also concentrated on physical fitness during his school days (when he was a boy scout) and later during his college days, working out in the gymnasium, swimming, rowing, going on long hikes, and developed a splendid physique. Academically he did brilliantly at Harvard, but during one semester he got one B along with three enviable A grades. The B upset Dharmanand into chiding him for wasting his time. As a challenge, Baba registered himself for a summer course in Italian (which he had not studied before) and received an A+ which the instructor had not given anyone before, as he informed Baba. He promptly sent the note to his father without comment [Arguimbau 1974]. A college friend remembers Baba's inexpensive room, with a photo of Gandhiji as the only decoration and lined with shelves full of books on many subjects and in many languages. At the same time, Baba could be a fun-loving and boisterous undergraduate (ibid).

Intellectual Biography

In his essay, 'Steps in Science', which sketches his intellectual autobiography, Kosambi speaks with appreciation of the excellent school and college education he had received in the us. He had majored in mathematics and studied, along with other subjects, the mandatory European languages - Greek, Latin, French and German - on which he was to build later.2 The rich library collections had exposed him to the wonders of all branches of knowledge from astronomy and the physical sciences, from plumbing the depths of the psyche and delving into the collective human past, to fathoming the mechanisms of the human body, its ailments and cures. He mentions being most impressed by the writings of Alexander von Humboldt, Albert Einstein, Sigmund Freud and H G Wells, and the lives of Louis Pasteur and Claude Bernard. Given his intellectual capacity and energy, Kosambi could have made his mark in any one of these branches on knowledge. That he chose mathematics was because he "could not resist its fascination. Mathematical results possess a clarity and give an intellectual satisfaction above any others. They have absolute validity in their own domain, due to the rigorous logical process involved, independent of experimental verification upon which applications to the exact sciences must depend. Mathematics was the language of nature, "scientiarum clavis et porta" as Roger Bacon put it" [Kosambi 1974: 195].

After graduating from Harvard with high distinction (summa cum laude) in 1929, Kosambi found it difficult to receive a scholarship for further studies, partly because of the economic

depression of the time and partly because his mathematics professor was unsure of his commitment to the subject, given his tendency to traverse over a wide field of disciplines (with his father's encouragement). He returned to India for good. Subsequently he could have emigrated to the west, but chose to stay in India close to his cultural roots and Indological research materials, except for occasional visits.

Academic Pursuits

Kosambi taught mathematics all his life, until retirement – starting with Benares Hindu University immediately upon returning to India (1929-31). Here he was not in tune with the ideological ethos of the founder and vice-chancellor, M M Malaviya (who was a friend of Dharmanand's) although he threw himself into teaching with enthusiasm and even held additional classes for students in German which he believed to be the language of science. He was soon recruited by Professor Andreville, a mathematician from Paris who had been invited to head the department at Aligarh Muslim University. Here he collaborated on mathematical research with another colleague, Vijaya Raghavan. From Benares and later from Aligarh, he published research papers in mathematics, in Indian as well as French and German journals. Students were impressed by this young "meat-eating brahmin" who also played hockey with them. (Gaud Saraswat brahmins traditionally eat fish but not meat; Dharmanand, as a Buddhist, was a vegetarian.)

In 1933, following the departure of his two mathematics colleagues, Kosambi left Aligarh and joined the faculty of Fergusson College at Pune. Here he became known as an exacting professor, not easy to understand and not popular with those who expected to be spoon-fed, but highly admired by the bright and serious students who were willing to work hard. He also managed the library of The Indian Mathematical Society. His colleagues in mathematics, though highly qualified, had given up research and focused on institutional matters. Their resentment of his intellectual pursuits and perceived arrogance was essentially a clash of two radically different academic systems and cultures -Harvard and Pune which measured mathematical ability solely by the British degree of "wrangler". It was also a clash of the relatively egalitarian American ethos and the convention-bound, hierarchical Indian culture. Ultimately, as his fellow professor V V Gokhale (1974: 362) bemoaned, Kosambi had to leave the college because of our "examination-ridden system and uninspiring standards of education".

Damodar Dharmanand Kosambi was born on July 31, 1907 and died on June 29, 1966. July 2007 to June 2008 was celebrated as the D D Kosambi birth centennial.

This special issue of EPW contains 10 articles that discuss many aspects of Kosambi's work in history, numismatics, Sanskrit and archaeology; on religion, caste and other areas. Some of the papers present the main features of Kosambi's work and discuss their importance at the time; others provide a critical re-examination of the research half a century later.

One important area that is not covered in this collection is Kosambi's work in mathematics. EPW invited scholars to write on his work in mathematics but it did not succeed in obtaining an article that examined this area of Kosambi's research.

EPW is grateful to Romila Thapar for her suggestions and help in putting together the papers for this special issue. -Ed.

After 14 years he left because of a serious difference of opinion with the authorities, and joined the newly established Tata Institute of Fundamental Research (TIFR) in Mumbai in 1946, invited by the noted scientist Homi Bhabha who was the director (and about the same age). Their initially warm collegial relationship soured after a few years, mainly due to a clash of personalities, even as Bhabha strayed away from research and focused on institution-building, as a "managerial scientist" [Panse 2007: 113]. Another major divergence was ideological - the capitalist-Marxist divide apart, their perspectives on atomic energy were contradictory. Bhabha was involved in developing India's atomic energy, with full support from Jawaharlal Nehru, while Kosambi repeatedly articulated his vision of solar energy as most appropriate for a developing country like India. Additionally, Kosambi's lack of sole concentration on mathematics served as an excuse. His contract at TIFR was not renewed in 1962; he had himself been well enough aware of the situation to expect to be relieved of his post much earlier.

In 1964 he was appointed scientist emeritus by the Council for Scientific and Industrial Research and affiliated himself to the Maharashtra Association for the Cultivation of Science at Pune. About this time he also accepted the invitation from Major-General E B Habibullah, commandant of the National Defence Academy at Khadakwasla near Pune, to found the Archaeological Society in the "hobbies" section of the academy. With an enthusiastic band of instructors and cadets, he hunted for microliths and megaliths, rock carvings and other artefacts across the Deccan tract (as he did with his group of dedicated though informal students). In the process, he discovered the Karsambla caves in the forest at the foot of the Western Ghats below Bhaje caves, which Habibullah (1974: 328) describes as containing "evidence of frescos and decorations that must have made Ajanta provincial", though in a state of decay due to greater exposure to the weather. This discovery resulted from Kosambi's thesis that Buddhist caves were located at a day's march of merchant caravans along major trade routes (and not at inaccessible spots suitable for hermits, as had been believed). This interest in investigating trade routes had earlier led him to suggest to the government of the then Bombay state that the proposed, expensive funicular through Naneghat should be abandoned in favour of a motorable allweather road that could be made economically through the next pass to the north [Banerjee 1974: 315].

Honours and Accolades

During all this time he won several prizes – the first Ramanujan Memorial prize in 1934 (at the age of 26), and a special Bhabha prize in 1947, among others. He was invited to go abroad several times. In 1948-49, he was a United Nations Educational, Scientific and Cultural Organisation (UNESCO) fellow to the us and UK for electronic calculating machine research. In the winter semester of 1949, he was a visiting professor in path-geometry at Chicago and later a guest of the Institute for Advanced Study at Princeton where he had extensive discussions with Albert Einstein. In 1955 he was invited by the Soviet Academy of Sciences to lecture and to attend their first conference on the peaceful uses of atomic energy. He was invited by the Academia Sinica (Beijing, China)

to suggest statistical methods for the forecasting of food-crops and quality control in industry. For lectures on Indian history, he was invited by the University of London and the School of Oriental and African Studies, where he first met A L Basham. He attended conferences and gave lectures in most countries of the world and kept up an active, worldwide correspondence.

From 1950 Kosambi was seriously involved in the World Peace Council. In June 1955, he headed the Indian delegation (the largest) to the World Peace Conference at Helsinki, Finland, which was chaired by the famous French Nobel-laureate Frederic Joliot-Curie, and attended by J D Bernal and Jean-Paul Satre, among others. Basham (1974: 18) has remarked that Kosambi seemed to have "only three interests, which filled his life to the exclusion of all others – ancient India, in all its aspects, mathematics and the preservation of peace". He worked hard and with devotion for all three, "according to his deep conviction".

In the meanwhile, in 1931 Kosambi had married Nalini Madgavkar of Mumbai, who had graduated in mathematics and Sanskrit from Wilson College, in an arrangement between two family heads (of the same subcaste) who were on close friendly terms. The marriage of the fiery intellectual and committed Marxist to the gentle, soft-spoken young woman from a wealthy and progressive family, with conventional accomplishments (and some unconventional ones like tennis, swimming and horseriding), has been a puzzle to many. The reason for the arranged marriage must have been Kosambi's extreme shyness with women. Incidentally, his three sisters chose their own husbands: the oldest Manik married B K Ram Prasad, an Iyengar; the middle sister Manorama married T R Sathe, a (Maharashtrian) Chitpavan brahmin; and the youngest Kamala married B V Bhoota, a Gujarati.

The couple eventually settled down in Pune in the then Bhandarkar Oriental Research Institute colony. Here Kosambi designed a bungalow in the Goan (Hindu) style, built in 1936 on a plot of land bought by his father and with money contributed by his father-in-law. The two daughters, Maya and Meera, studied at the nearest Marathi-medium school (because of Baba's insistence on the mother-tongue being the only appropriate medium for school education) and then Fergusson College.³ Maya did her Ma in psychology, got married in 1960 and went abroad. I did my Ma in English literature and briefly taught at Fergusson College, becoming the third-generation Kosambi to do so – Dharmanand had taught Pali there and D D mathematics and statistics. In 1966, I went abroad myself for further studies.⁴ This happened after Baba's death on June 29, 1966, shortly before his 59th birthday.

2

Kosambi's astounding intellectual journey effectively demonstrates the meaninglessness of disciplinary boundaries and the insistence on formal training and degrees as the only marker of knowledge.

Mathematics was to be the meridian along which his life was plotted for many years. The famous British scientist, J D Bernal (1974: 331) (who knew Kosambi as "a man of quite exceptional intelligence and charm, particularly in the work concerned with the Indian peace movement"), assesses that mathematics was

"his main contribution to science, particularly in the field of statistics and Stochastic theory".

Intellectual Journey

For some 20 years, Kosambi's main work lay in tensor analysis and path-geometry (a term he coined). Even if he had confined himself to mathematics alone, his contribution would have been substantial, as shown by the numerous papers he published in Indian and international journals.5 But his intellectual journey led him to traverse diverse disciplinary fields. While engaged primarily in mathematics, he wrote a paper on genetics which was very successful. What became known as "the Kosambi formula for chromosome mapping" was widely used by professional geneticist, although, as he says, he was "accused at times of not appreciating his own formula".6 The formula was an advance over the existing chromosome theory of heredity, comprising the arrangements of genes and their recombination through the phenomenon of crossing over. N R Bhat, agricultural scientist and specialist in genetics and plant breeding, has written about having tested Kosambi's empirical formula on plants, and found it to have a good fit. In Bhat's (1974: 300) inevitably complex and technical words, "the Kosambi formula", though "largely an intelligent empiricism", is the only one so far which gives satisfactory additive estimates of map lengths irrespective of the kinds of organisms and the lengths of their chromosomes on which recombination data are gathered.

Interest in Numismatics

As a mathematician, Kosambi taught himself statistics by selecting practical problems to solve. One of them was a study of punchmarked coins, undertaken about 1940. The only large hoard available was that of Taxila coins and as a control group he used modern coins. After weighing over 7,000 modern coins (making a total of about 12,000 coins), he says, "it was possible to lay the foundations of numismatics as a science, as contrasted to a branch of epigraphy and archaeology". His articles on numismatics were numerous enough to merit publication in a separate volume entitled Indian Numismatics, though this happened years after his death [Kosambi 1981]. In his Introduction to the volume, B D Chattopadhyaya says that in assessing Kosambi's contribution to the study of Indian numismatics, one should remember that the chronology of the punchmarked coins was not his only concern. If, in his language, "every hoard of coins bears the signature of its society", then what Kosambi was aiming at was to decipher this signature in the hoards of coins as also elsewhere. Out of his vast range of possibly controversial - observations in this regard, Chattopadhyaya (1981: viii-ix) mentions a selected few: that coinage began with traders, that the composition of the two hoards of coins (predominated by Magadha coins) at Taxila helps one to reconstruct the economic history of both Taxila and the Mauryans during a specific period, and that the paucity of indigenous coins in the post-Gupta period was a marker of a decline in inter-village trade.

The study of old coins aroused Kosambi's intellectual curiosity about the kings who struck the coins. The study of old records, he says, "meant some mastery of Sanskrit, of which I had absorbed a little through the pores without regular study", having worked informally with his father. He acquired the requisite mastery by

applying his usual problem-solving method. He took up a specific work, the simplest being Bhartrihari's three 'shatakas', or centuries, of epigrams (subhashitas). His first articles on the topic were published in 1945. But Bhartrihari's text was defective, necessitating text-criticism, which he undertook by studying about 400 manuscripts [Kosambi 1948]. During the five years that the process took, he "rescued over 50 poets from the total oblivion to which lovers of Sanskrit had consigned them, not to speak of adding to our meagre knowledge of many others". In the process he had, in his own words, "fallen into Indology, as it were, through the roof" [Kosambi 1974: 199-200].

In his article on Bhartrihari's philosophy as articulated in his *Vairagya-shataka*, entitled 'The Quality of Renunciation in Bhartrihari's Poetry', Kosambi's polyglossia comes into full play. Here he cites, in addition to Bhartrihari's Sanskrit verses and the occasional Buddhist Pali verse, Lolfgang von Goethe in German and Dante Alighieri in Italian, while encompassing with ease the works of Moriz Winternitz and William Shakespeare, Plato and Aeschylus, and Indian saint poets such as Kabir, Tulasidas and Tukaram.

Sanskrit Literature

By now Kosambi had become so renowned for his text-criticism, that he was invited to edit the text of Vidyakara's Subhashitaratnakosha for the Harvard Oriental Series.8 (His text criticism was modelled on Dharmanand's edition of the Pali Visuddhimagga, also published in the Harvard Oriental Series, in which he had possibly assisted him.) In his Preface, the series editor Daniel HH Ingalls acknowledges that "Kosambi has assembled here a wealth of precise data which not only aid the understanding of the present anthology but furnish precious material for the historian of Sanskrit literature". Ingalls (an emphatic non-Marxist) also throws interesting light on his disagreement with Kosambi, "not only because I judge the artistic merits of the poems to be higher than he does, but because I feel that a class theory, while it may explain to some extent the content of a literature, is a very improper guide to its excellence". Ingalls concludes by asserting that this difference of opinion had certainly "not weakened the bonds of friendship" between them [Kosambi and Gokhale 1957: Preface x]. Kosambi's insistence on treating Sanskrit texts and later also ancient myths as sources of data for analysing social and cultural life of their period of origin rather than as sacred words beyond analysis also led the more conservative Sanskritists in India to perceive him as an iconoclast.

Kosambi's last Sanskrit work was to be the posthumously published translation of the Sanskrit play *Avimaraka*, believed to be by Bhasa. The translation of this playful love story was originally made by J L Masson and revised in accordance with Kosambi's suggestions. As an acknowledgment of his debt to Kosambi, Masson has dedicated it to him with the touching Sanskrit quotation: "A man is not dead when those he loved remember him".

Indian History

In the meanwhile, his intellectual journey had taken Kosambi much farther afield. From Sanskrit which he had mastered, it was a natural progression to ancient Indian history, the social setting

37

of Sanskrit literature. In history-writing, Kosambi is credited with having wrought a revolution through his redefinition of the nature and scope of history. For one thing, he dismantled the entrenched notion of fixed periods – ancient, medieval and modern periods of Indian history. For another, he designed an integrated methodology for harnessing diverse sources. In his famous and seminal essay – which he labels a "note" – entitled "Combined Methods in Indology", he critiques the prevalent practice of placing sole reliance upon linguistic sources. Rather "the linguistic study of the problems of ancient Indian culture would be more fruitful if supplemented by an intelligent use of archaeology, anthropology, sociology and a suitable historical perspective" [Kosambi 2002: 3]. Accordingly, he supplemented his archival sources by extensive fieldwork.

Kosambi's first book on ancient Indian history, the pathbreaking An Introduction to the Study of Indian History (1956), became so highly influential that, in Irfan Habib's opinion, within five years of its publication, it was considered mandatory reading for professors and students of Indian history all over the world. The book, together with two more that followed – Myth and Reality (1962) and The Culture and Civilisation of Ancient India in Historical Outline (1965) – has been translated into many languages within and outside India. Such was the resonance of these books among historians, that some like Romila Thapar have regarded him informally as a guru without having actually studied with him.

Marxism – Historical Framework

How exactly Kosambi selected Marxism as his basic historical framework is not known, though the early decades of the 20th century had witnessed a strong interest in Marx and socialism in the Us. Dharmanand mentions being first introduced to Marx by a Dutch fellow passenger, during his first voyage to the Us in 1910. During this visit, he made a study of Marx and frequently attended lectures at socialist meetings. In 1912, he gave a lecture on Marx in Pune's famous Spring Lecture Series. He subscribed to the socialist idea of equality, but not the need or inevitability of violent revolution. DD had probably acquired his knowledge and interest in Marxism from his father and from his intellectual milieu, and expanded them further through his copious reading.

Acknowledging his debt to Marx's "theory of history known as dialectical materialism" or Marxism, Kosambi spells out his historical perspective as "the presentation, in chronological order, of successive developments in the means and relations of production" [Kosambi 1975: 1]. A study of material culture acquires special significance in the case of India, because of a lack of historical records or chronicles; besides, even in Europe which abounds in such written records, he argues, they have been supplemented by archaeology. But, having committed to the Marxist theory, he also cautions us that: "The adoption of Marx's thesis does not mean blind repetition of all his conclusions (and even less, those of the official, party-line Marxists) at all times. ... What Marx himself said about India cannot be taken as it stands" (ibid: 10).

Kosambi's disagrees with Marx's thesis of the small unchanging and self-sufficient villages, and his argument that the villages produced only what they required and not commodities for

exchange. Kosambi finds this analysis "misleading", because the self-sufficiency of Indian villages has been exaggerated:

Most villages produce neither metals nor salt, the two essentials that had mostly to be obtained by exchange, hence implied commodity production. ...The villages did not exist "from times immemorial". The advance of plough-using agrarian village economy over tribal India was a great historical achievement by itself. Secondly, even when the size of the village unit remains unchanged, the density of these units plays a most important role; the same region with two villages, or two hundred, or twenty thousand cannot bear the same form of superstructure, nor be exploited by the same type of state mechanism. ...Change of quantity ultimately means change of quality. Similarly, we cannot let pass without challenge Marx's statement that 'Indian society has no history at all...what we call its history, is but the history of successive intruders who founded their empires on the passive basis of that unresisting and unchanging (village) society'. In fact, the greatest periods of Indian history, the Mauryas, Satavahanas, Gupta, owed nothing to intruders; they mark precisely the formation and spread of the basic village society, or the development of new trade centres (ibid: 11-12).

Kosambi's original analysis of the nature of Indian feudalism and his concepts of "feudalism from above" and "feudalism from below" have also been the subject of a great deal of discussion – and controversy – among historians of India:

Feudalism from above means a state wherein an emperor or powerful king levied tribute from subordinates who still ruled in their own right and did what they liked within their own territories – as long as they paid the paramount ruler. ... By feudalism from below is meant the next stage where a class of landowners developed within the village, between the state and the peasantry, gradually to wield armed power over the local population. This class was subject to military service, hence claimed a direct relationship with the state power, without the intervention of any other stratum (ibid: 295).

An excellent example of Kosambi's (1962a) "combined methods" is the article "Urvasi and Pururavas" - his most dazzling piece of scholarship, as the late Ravinder Kumar called it once in an informal conversation. Kosambi locates this ancient Indian myth within its social origins through the use of both linguistic and other cross-cultural sources. Starting with Kalidasa's play on the same theme, he examines the legend in its eight different sources, from the Shatapatha Brahmana to the Mahabharata. The essay traverses over the question of the Aryan or pre-Aryan origin of the myth, a discussion of goddesses of birth and death, and takes the reader over references to and illustrative drawings of Indian, Hittite, Harappan and Indo-Greek artefacts. All that can be added to this very inadequate outline is that the essay ends with a discussion of the Greek myths of husband-sacrifice and widow-burning, and their Indian parallels. The whole is held together by a series of seemingly casual statements which reveal a deep and wide inter-disciplinary knowledge.

Another essay that created a sensation, especially in the us, was his 'Living Prehistory in India' which appeared posthumously in the *Scientific American* (February 1967) and which pivots on the salience of fieldwork. In Kosambi's words:

Since by definition [the prehistorian] works with evidence other than written records, he sometimes turns for illuminating parallels to living peoples who themselves have not written history. Perhaps nowhere in the world can such parallels be found more readily than in India.¹²

Based on a study of tribal communities which "preserve many features – in fossilised form, as it were – of Indian history", he

analyses the custom of hook-swinging which possibly stemmed from the ancient human sacrifices, and the conflict between the worship of the mother-goddess and the father-god.

This extensive re/writing of history elicited the expected and contradictory responses. B D Chattopadhyaya (editor of Kosambi's *Combined Methods in Indology and Other Writings*) captures this simultaneous valorisation and demonisation in these words:

Kosambi has gradually emerged as an icon, with his name and work often, and on disparate occasions, invoked by social scientists, journalists and even sometimes practitioners of contending political ideologies. The image is that of a pioneer of genuine Marxist scholarship of the Indian past, that of the 'father of Scientific Indian History' who effected a 'paradigm shift' in Indian historical studies; at the same time, he is also viewed as a nasty iconoclast with a 'predeterministic' approach, imposing an alien framework and an inappropriate perspective on Indian cultural heritage, as an excuse for rationality [Chattopadhyaya 2002: xiii].

Kosambi's historical writings make serious and heavy reading, leavened by scattered touches of humour. But few are aware that he wrote a very short story about the uprising of 1857 called 'The Kanpur Road' which is a piece of great literary beauty. Its initial two-thirds was written as an "English A" theme at Harvard in 1924; it was expanded and published in the Fergusson and Willingdon College Magazine in 1932.13 This is a fictionalised firstperson account of an encounter with one Govind Singh, a forlorn survivor of the uprising, having killed his own brother fighting on the side of the rebels, in "fratricidal loyalty" to the British army. But a deeper meaning is not absent: Kosambi reads the uprising itself as a fatal encounter of Indian feudalism with British industrial capitalism, with Govind Singh's sword being one of the many that had "opened the first secure path for the grimy civilisation of Birmingham, Manchester and Sheffield in many an unhappy corner of the world". As for the issue of loyalty, Kosambi concludes: "Govind Singh had never eaten British salt; only Indian salt taxed by the British" (emphasis in the original).

3

Dazzling and meticulous scholarship notwithstanding, Kosambi was no ivory-tower scholar; his primary concern was the practical utility and social relevance of his research. He believed that science should benefit society. Thus he advocated the use of solar power in a developing country like India, though his advocacy received barely a lukewarm response at the time. He was also passionately committed to the peaceful uses of atomic energy and was involved in the World Peace Council from about 1950 to 1962. It is of interest to note that Kosambi dedicated his *Subhashitaratnakosa* volume (1957) to "all those who work for peace by peaceful means".

Earlier, upon his return from the us, Kosambi had immediately and inevitably been caught up in the nationalist struggle. Dharmanand had already joined the struggle, having met Gandhiji first in 1916 during the latter's visit to Pune, through Acharya Kripalani. He was subsequently to host Gandhiji at his home in Pune. In 1922 Dharmanand joined the Puratattva-Mandir of Gandhiji's Gujarat Vidyapith at Ahmadabad, and taught Pali and Buddhism there for three years. In May 1930, soon after Gandhiji's salt satyagraha at Dandi, Dharmanand

went to Shirode in Goa to join the proposed salt satyagraha there as a volunteer, but was compelled by circumstances to become its leader, much against his will. His participation in the non-violent struggle continued, and he was subsequently jailed for a few months at Thane.¹⁴

DD's participation in the nationalist struggle was less dramatic, although he remained a staunch nationalist, and wore khadi for many years. About his activities in the years preceding independence, he says:

Months passed in unorthodox activities such as aid to the wounded [most probably during the Indian naval ratings' uprising in Mumbai's docks in 1946, which led to a British massacre of Indian sailors and civilians]; helping an occasional "underground" worker no matter how silly his plans and how meagre my dwindling resources; trying to persuade some groups of students that wrecking the college, where I then lectured on sufferance while they were supposed to be receiving an education, would be ineffective as a method of forcing the British to quit India. 15

Culturally, Kosambi was a citizen of the world, and also - with his unique combination of intellectual width and depth, nationalist commitment to India and its culture, and American habits and mannerisms – a misfit everywhere. He was a larger than life personality and even his personal life was an important statement. His integrity - personal and intellectual - was beyond question. Secularism formed the core of his personality. He made no distinction based on religion, caste race or gender, and brought up his children with the same secular ideology. He was very simple, almost puritanical, in his habits - he never touched liquor, cigarettes or paan, never drank any beverage other than milk or cocoa, and started drinking coffee (milky Nescafe) late in life, in the mid-1950s. He wore simple clothes, and spent his money mainly on books (and chocolates, for he had a strong sweet tooth), and occasional indulgences like the weekly Wednesday lunch with friends at his favourite Chinese restaurant near the Gateway in Mumbai. He also helped the needy of his acquaintance with loans or gifts of money. His insistence on commuting in the comfort of the first class surprised many. Ingalls makes the (oft-quoted) tongue-in-cheek remark about their Pune-Mumbai journey together: "I, the American capitalist, had never travelled in India by other than second class fare. My Marxist friend insisted that I join him in his first class compartment" [Ingalls 1974: 27].

Kosambi had a tremendous capacity for hard work – any time of the day or night. This he had perhaps imbibed from his father. In his usual state of self-induced poverty, Dharmanand had uncomplainingly trudged the rough and snowy path through the Himalayas up to Nepal barefoot in the hope of obtaining Buddhist texts. DD may not have gone to such extremes, but was nevertheless capable of sustained hard work, whether it was reading, fieldwork, or any other part of his research.

The Personality

All his life, Kosambi remained very health- and fitness-conscious; weight-lifting and walking were his regular activities. He would walk every morning to the railway station more than three miles away, with his backpack filled with books, to catch the "Deccan Queen" to go to work at TIFR in Mumbai (having found the

Mumbai climate too disagreeable to stay there). He was one of the first handful of Pune-Mumbai commuters, when the concept of commuting hardly existed in India. He would sometimes play bridge with co-passengers, but usually did his work. In fact, the preface to his *Introduction to the Study of Indian History* mentions the Deccan Queen as his address. He also took long walks up the hill behind our house with our two dogs and an air-gun. Earlier, in the Us, he had conducted ballistic research by firing guns repeatedly. At home in Pune, he would do regular target practice in the garden with his three air guns, fixing small paper targets on a tree.

One did not think of Kosambi as an artist, though his collection of art books certainly established him as a connoisseur of art. But photography was a hobby that he took very seriously, striving for artistic perfection. He was an enthusiast of blackand-white photography and even developed his films himself in his study - turned into a dark room for the occasion. Later he made colour slides for his ethnographic work. He was not generally a connoisseur of music, but had a strong preference for Paul Robeson's songs and Subbulaxmi's bhajans - in an eclectic mix. For relaxation he played gin rummy with us, a bridge foursome being hard to come by at short notice; nobody in the family played bridge beside my mother. But perhaps his most favourite relaxation was reading murder mysteries. His shelf of light reading was peopled by everyone from Arthur Conan Doyle and Agatha Christie to Ellery Queen and Erle Stanley Gardner (alias A A Fair). Sherlock Holmes, Hercule Poirot and Miss Marple were household names with us, as were Perry Mason, Della Street and Nero Wolfe.

The contradictions and complexities that make up any individual were perhaps accentuated in Kosambi's case. As a person he could be warm and effusive or abrasive and abrupt, depending on his frame of mind. Many have shared with me warm memories of his kindness and some have recounted memories of less than kind and pleasant encounters. He could not suffer fools gladly, as many have observed - but then nor could he suffer less than brilliant mortals gladly and that covered most people around him. But while he did not always get along with famous academics, he always hit it off with villagers on his field trips. His sense of humour has been described as "devastating", and his jokes did not always amuse others as they amused him. Even his closest friends found that conversation with him was apt to turn into a monologue by him rather than a dialogue with him, and that with his boundless energy, he was "more exhausting than exhausted" [Banerjee 1974: 316].

The Genius at Home

His social life was usually part of his intellectual life (and both were outside the ambit of the family). One of his closest friends and a regular visitor to the house was V V Gokhale, professor of German at Fergusson College and his sometime collaborator (with whom he corresponded informally through notes written in German). R P Nene, then a young and active communist party worker and eager student of the Marxist interpretation of Indian history, was another regular visitor for many years and remained so even after Kosambi's death. Kosambi's devoted band of

informal students who visited the house often and accompanied him on field trips was an international group – comprising Indians, of course, and also Americans, Europeans, Japanese and others. He taught them a lot, as they have often shared with me and probably expected a lot from them in turn – as he did indirectly from his two children. The noted German Indologist and ethnographer Gunther Sontheimer who revered him as a guru, must have felt the same pressure. Gunther was very complimentary about my PhD thesis, remarking how proud my father would have been to see it. Being more forthright and honest (DDK-style), I responded that he would probably have given me a solid firing for a shoddy piece of research, for who could pass muster with him? Gunther replied that if he stopped to think of my father's reaction to everything that he himself wrote, he would have to go to the nearest tree and hang himself!

D D Kosambi was not your average father. A genius cannot be average at anything - that goes without saying. He was a strict disciplinarian and a perfectionist, though he never put pressure on us regarding studies or marriage. More importantly, he raised us as he would have his sons. I always stood in awe of him; Maya was bold and fared far better. She married a Bengali college friend, B B Sarkar, in 1960 and went with him first to the us and then to Sweden. In-between, she came back to have a child. This daughter, Nondita, was with us until she was three and then went to Sweden to join her parents. Surprisingly, when it came to Nondita, Kosambi was exactly your average grandfather - a very fond and doting grandfather. Usually, when he was at home, we had to be very quiet and not disturb him because he would be working. "Quiet, genius at work". We were not allowed to enter his study except when he asked for something. And then we would have to stand outside the door and ask, "May I come in?" - in English, although we spoke only Marathi at home. Sometimes little Nondita would go crawling into his study and I would run after her to stop her. Then he would wave me away, saying, "Leave us alone". Leave us alone. So it was not just the genius at work - it was the genius and his granddaughter at work. She would clamber up on his knee and if he was typing, she would put her little fingers on the typewriter keys. None of this amounted to disturbance. Always impressed by what I thought of as Nondita's great courage in treating DDK as a favourite playmate, I began to wonder later whether she had also inherited - or imbibed by osmosis - his intellectual and scientific quest.16

Nondita's little playmates from the neighbouring houses would often come to our house to play. Baba would give them sweets, which made him a popular "neighbourhood Ajoba". With his characteristic self-deprecating humour he would say, "When I was young, I was known as Dharmanand Kosambi's son. In my adulthood I was known as Maya's and Meera's father. Now I am known as Nondita's grandfather." The obvious – and obviously incredible – implication was that he did not have an independent identity of his own.

But he knew – and we all know – that he always had a unique, international identity as a brilliant, profound and original scholar straddling many fields of knowledge. And this identity will endure as long as scholarship itself endures.

41

NOTES

- 1 Dharmanand Kosambi (1876-1947), known reverentially as 'Acharya', had left his village home in Goa as a young man in his quest for knowledge of Buddhism. He had also become a Buddhist monk for a few years, before turning householder again, as the religion allowed. For his very interesting life, see his partial autobiography, Nivedan, appended with a biography: Dharmanand: Acharya Dharmanand Kosambi Yanche Atmacharitra ani Charitra (The Autobiography and Biography of Acharya Dharmanand Kosambi) edited and partly written by J S Sukhthankar, Mumbai: The Goa Hindu Association, 1976.
- D D Kosambi, 'Steps in Science' in Science and Human Progress, 1974, pp 193-205. The present outline is based largely on this essay and on the biographical sketch in the same volume. The other commemoration volume also contains personal reminiscences: Indian Society: Historical Probings; In Memory of D D Kosambi, edited by R S Sharma, Indian Council for Historical Research, New Delhi, 1974. Two biographies of Kosambi have been written, both in Marathi: Chintamani Deshmukh, Damodar Dharmanand Kosambi (Jivan ani Karya) (The Life and Work of DDK), Granthali, Mumbai, 1993; and Sudhir Panse, Uttunga ani Ekaki Sanshodhak, Damodar Kosambi (Damodar Kosambi: A Lofty and Lonely Researcher), Lokavangmaya Griha, Mumbai,
- 3 As an ideology, education in the mother tongue was fine, especially in view of Kosambi's distaste for Anglicisation of any kind. (Our lifestyle at home was by and large that of a middle class Maharashtrian family and we called our mother Aai and father Baba, as Maharashtrian children customarily do. 'Baba' was, incidentally, DDK's childhood nickname that stayed with him, as mentioned already.) But the educational experiment that started with my batch cut down radically on English, so that when I went to college, I could not converse much in English, let alone follow lectures adequately. This was a handicap in an educated and cosmopolitan family like ours, further aggravated by Baba's assumption that I had somehow inherited the requisite linguistic skills from him, along with more esoteric ones like reading the Brahmi script.
- 4 I returned to India after an unexpectedly long domicile of 20 years in Sweden where Maya had lived with her family until her tragically early death in 1975. There I studied (obtaining a Master's degree, a PhD and the post-doctoral degree of 'Docent', specialising in urban sociology), taught and conducted research with frequent visits to India, partly for collecting research data and partly to be with my mother. After returning to India in 1986, I taught sociology briefly at the University of Pune. In 1991, shortly after my mother's death, I joined the SNDT Women's University in Mumbai as a professor and director of the Research Centre for Women's Studies.
- 5 See the 'Bibliography of Kosambi's Writings' in *Science and Society*, pp 365-75.
- 6 Kosambi, 'Steps', p 198. This was most probably D D Kosambi's article entitled 'The Estimation of Map Distance from Recombination Values', Annals of Eugenics, Vol 12, 1944, pp 172-75. The element of uncertainly exists because unfortunately he did not have a complete collection of his own essays.
- 7 The essay is reproduced in D D Kosambi, Exasperating Essays, People's Book House, Poona, 1957, pp 72-93; and also in D D Kosambi, Combined Methods in Indology and Other Writings edited by Brajdulal Chattopadhyaya, Oxford University Press, Delhi, 2002, pp 703-20.
- 8 The Subhashitaratnakosha compiled by Vidyakara, edited by D D Kosambi and V V Gokhale, Harvard Oriental Series No 42, Harvard University Press, Cambridge, Massachusetts, 1957 (Harvard

- Oriental Series, edited by Daniel H H Ingalls, Vol 42). Incidentally, Ingalls has contributed an interesting and amusing piece about his personal interaction with Kosambi to *Science and Human Progress*, as have many others of Kosambi's friends and colleague.
- 9 Avimaraka (Love's Enchanted World), translated by L Masson and D D Kosambi, Motilal Banarsidass, Delhi, 1970.
- 10 D Kosambi, An Introduction to the Study of Indian History, Popular Prakashan, revised 2nd edition, Bombay, 1975; D D Kosambi, Myth and Reality: Studies in the Formation of Indian Culture, Popular Prakashan, Bombay, 1962, reprinted 1983; D D Kosambi, The Culture and Civilisation of Ancient India in Historical Outline, Routledge and Kegan Paul, London, 1965, also published as Ancient India: A History of Its Culture and Civilisation, Random House, New York 1965.
- 11 Dharmanand Kosambi, *Nivedan* reproduced in *Dharmanand*, op cit, pp 163, 170.
- 12 The essay is reproduced in Kosambi, *Combined Methods*, op cit, p 30.
- 13 The story is reproduced in D D Kosambi, Exasperating Essays, People's Book House, Poona, 1957, pp 67-71.
- 14 Dharmanand, op cit, pp 213-16. Dharmanand then travelled widely within and outside India, wrote many more books on Buddhism in Marathi, and spent the last year and a half of his life at Gandhiji's ashram at Vardha where he fasted unto death in July 1947, tired of persistent ill health and feeling that he had lived out his life.
- 15 Kosambi, 'Editor's Preface' in *Epigrams*, op cit, pp 1-11 (reference p 2).
- 16 Nondita unfortunately never met her grandfather again; he died three years after she left India. She is now a medical doctor with a double specialisation and a PhD in one of them, cardiology. She practises as a cardiologist at the most advanced hospital in Sweden, at Huddinge outside Stockholm.

REFERENCES

- Arguimbau, Lawrence B (1974): 'Baba of Harvard Days' in Science and Human Progress: Prof D D Kosambi Commemoration Volume, Popular Prakashan, Bombay, pp 318-21.
- Banerjee, A K (1974): 'DDK: A Rough Diamond' in Science and Human Progress, op cit, pp 311-17.
- Basham, A L (1974): "Baba": A Personal Tribute' in R S Sharma (ed), *Indian Society: Historical Probings; In Memory of D D Kosambi*, Indian Council for Historical Research, New Delhi, pp 16-19.
- Bernal, JD (1974): 'D D Kosambi' in Science and Human Progress, op cit, pp 331-34.

- Bhat, N R (1974): 'The Kosambi Formula for Chromosome Mapping' in Science and Human Progress, op cit, pp 296-300.
- Chattopadhyaya, B D (2002): 'Introduction' in D D Kosambi, *Combined Methods*, op cit, pp xiii-xxxvii.
- (1981): 'Introduction' in DD Kosambi, Indian Numismatics, Orient Longman, New Delhi, pp v-xi.
- Deshmukh, Chintamani (1993): Damodar Dharmanand Kosambi (Jivan ani Karya) (The Life and Work of DDK), Granthali, Mumbai.
- Gokhale, VV (1974): 'Damodar Dharmanand Kosambi' in Science and Human Progress, op cit, pp 361-64.
- Habibullah, E B (1974): 'Tramping with Kosambi through History' in *Science and Human Progress*, op cit, pp 327-30.
- Ingalls, Daniel H H (1974): 'My Friendship with D D Kosambi' in RS Sharma (ed), *Indian Society*, op cit, pp 2-33.
- Kosambi, D D (1948): The Epigrams Attributed to Bhartrihari, Including the Three Centuries (Singhi Jain Series, Vol 23), Bharatiya Vidya Bhavan, Bombay.
- (1962): Myth and Reality: Studies in the Formation of Indian Culture, Popular Prakashan, Bombay, (Reprinted 1983).
- (1962a): 'Urvasi and Pururavas' in *Myth and Reality*, op cit, pp 42-81.
- (1965): The Culture and Civilisation of Ancient India in Historical Outline, Routledge and Kegan Paul, London. Also published as Ancient India: A History of Its Culture and Civilisation, Random House, New York, 1965.
- (1974): 'Steps in Science' in Science and Human Progress, op cit, pp 193-205.
- (1975): An Introduction to the Study of Indian History, Popular Prakashan (revised 2nd edition), Bombay.
- (1981): Indian Numismatics, Orient Longman, New Delhi.
- (2002): 'Combined Methods in Indology' in Brajdulal Chattopadhyaya (ed), Combined Methods in Indology and Other Writings, Oxford University Press, Delhi, pp 3-21.
- Kosambi, D D and V V Gokhale (eds) (1957): The Subhashitaratnakosha compiled by Vidyakara, Harvard Oriental Series, No 42, Harvard University Press, Cambridge, Massachusetts (Harvard Oriental Series, edited by Daniel H H Ingalls, Vol 42).
- Panse, Sudhir (2007): Uttunga ani Ekaki Sanshodhak, Damodar Kosambi (Damodar Kosambi: A Lofty and Lonely Researcher), Lokavangmaya Griha, Mumbai.
- Sharma, R S (ed) (1974): Indian Society: Historical Probings; In Memory of D D Kosambi, Indian Council for Historical Research. New Delhi.

For the Attention of Subscribers and Subscription Agencies Outside India

It has come to our notice that a large number of subscriptions to the EPW from outside the country together with the subscription payments sent to supposed subscription agents in India have not been forwarded to us.

We wish to point out to subscribers and subscription agencies outside India that all foreign subscriptions, together with the appropriate remittances, must be forwarded to us and not to unauthorised third parties in India.

We take no responsibility whatsoever in respect of subscriptions not registered with us.

Manager

Early Indian History and the Legacy of D D Kosambi

ROMILA THAPAR

This article discusses three of the many themes in D D Kosambi's writings which have been seminal to the study of early Indian history: the relationship between tribe and caste, the link between Buddhism and trade, and the nature of feudalism in India. Many of the methods of Kosambi's analyses are substantially valid even 50 years later. Some need reconsideration either because of new evidence or because of new theories of explanation or because the overall perspectives of the past are today differently nuanced. Kosambi's intellectual perspectives and sensibilities were inevitably of his own times. Up to a point they carry traces of both the idealism and the dismissals of those times. He insistently asserted his autonomy from the clutches of contemporary orthodoxies, both of the Left and of the Right. The past was not to be used as a mechanism of political mobilisation as it has increasingly come to be among some in our time. The sources that inform us about the past have to be meticulously analysed and subjected to a rigorous methodology irrespective of their status or the authority they command. Kosambi would undoubtedly have agreed that the advance of knowledge was dependent on a constant critiquing of existing explanations.

This is a slightly expanded version of a lecture given at Pune on July 31, 2007 to mark the inauguration of the birth centenary year of D D Kosambi. I would like to thank Meera Kosambi and others who took on the responsibility of organising the series of lectures.

It was an immense honour for me to have been asked to give a lecture inaugurating the year-long remembrance of D D Kosambi during his birth centenary. For me personally, it was remembering someone whose work provoked me into thinking beyond the obvious in my interpretation of early Indian history and who allowed me the privilege of some valuable discussion. I mean this quite literally as he was not easily accessible and discussion with him was therefore a privilege.

Romila Thapar is professor emeritus, Centre for Historical Studies, Jawaharlal Nehru University, New Delhi.

first met Kosambi 50 years ago. In 1956 I was a PhD student at the School of Oriental and African Studies of London University, working on a thesis on Ashoka Maurya. My supervisor A L Basham announced one day that he had invited Kosambi to give some lectures on Hinduism. We had read a couple of his papers, but his book, An Introduction to the Study of Indian History, was to be published only later that year. His first lecture, we assumed, would be about the Rigveda, since scholars generally began with that. But no. He showed some slides of a domestic ritual associated with the name-giving ceremony of a child. It involved dressing the pestle of the household in baby clothes and placing it in the child's cradle. Kosambi provided an explanation that touched on many facets: the bestowing of blessings and imbuing the child with strength, belief systems in prehistoric societies, theories of mother-right, and fertility rituals. He argued that the beginnings of Hinduism lay in these ideas and practices. Religion was and is not just a matter of belief but also involves, and perhaps even more so, the meaning of the ritual occasion as social articulation.

In the course of that year I was visiting Mauryan period sites in connection with my thesis. Coming to Bombay, I mentioned to my brother Romesh Thapar that I would like to discuss my work with Kosambi. My brother and others such as Sham Lal were part of a small but lively study group that had been discussing with Kosambi his manuscript of what was to be published as An Introduction to the Study of Indian History. On my contacting Kosambi he explained that he was rather busy that week, but on hearing that I was going to Pune, suggested we travel together by the Deccan Queen on which he commuted between Pune and Bombay. It was a memorable journey. He had walked the entire route and knew every hill-top, stone and tree of consequence in terms of ethnographic and historical connections. His familiarity with the landscape was phenomenal. Those of us who were backing up our library research with field work had to think again about the meaning of field work and the co-relation of literary and tangible sources.

I called on him in Bombay at the Tata Institute of Fundamental Research on a few other occasions and our conversations were largely clarifications that I was seeking on what he had written. Prior to the publication of the *Introduction*, his papers on history had been published in various journals such as the *Bombay Branch of the Asiatic Society*, and *The Annals of the Bhandarkar Research Institute*. These were scattered papers and not always easily accessible. It was helpful therefore to have his ideas on history distilled into three books: *An Introduction to the Study of Indian History* (1956), *Myth and Reality: Studies in the Formation of Indian Culture* (1962) and *The Culture and Civilisation of*

Economic & Political weekly EPW JULY 26, 2008 43

Ancient India in Historical Outline (1965). His important papers pertaining to history have been republished now in a collection.¹

Kosambi's major writings date to the 1950s and 1960s although he had begun to publish articles on Indology and Indian history earlier. These years were a turning point in the study of ancient history² and his writing was in many ways a crossing of the threshold. His studies moved out of the confines of colonial and nationalist historical writing and made visible new dimensions of the past. What had earlier come under the rubric of Indology was now being inducted into the social sciences which were a different kind of study. This was largely because the earlier interest in dynastic history and chronology was being expanded to include social and economic history and the interface of this with cultural articulation. Culture for him was not a separate entity, but an intrinsic part of the making of a historical context. This may sound trite today but 50 years ago the inter-weaving of society, economy and culture was a departure from the standard histories of ancient India.3 His discussion of what he called combined methods in Indology was a reflection of this change.⁴ These new dimensions gradually superseded the previous ones in terms of the primary interest of historians. In part this followed from the theoretical problems of social, economic and cultural change becoming the concerns of Indians in the post-colonial period. There was an interest now in ascertaining what had continued and what had changed from pre-colonial times. But it was also because the discipline of history was expanding its investigations into the past. Equal emphasis was now being given to understanding and explaining the past as was earlier given to gathering information on the past. Apart from the continuing discussion on colonial and nationalist historical writing on early India, there was a turning to other ways in which the Indian past had been viewed. Scholars of Indian history both in India and elsewhere were debating the ideas of Max Weber, the French Annales School and Karl Marx and their studies of some aspects of early India. Marxism elicited the maximum attention in India.

Outstanding Exponent of Marxist Interpretation

The outstanding exponent of the Marxist interpretation of Indian history in all its complexity and the one who ushered in a paradigm shift in the study of ancient Indian history was D D Kosambi. The paradigm shift was the move from colonial and nationalist frameworks and the centrality of dynastic history to a new framework integrating social and economic history and relating the cultural dimensions of the past to these investigations. This provided the context and highlighted the interface of different facets of society. In expanding historical information to include data from archaeology, linguistics, technology and ecology, he was also able to point out socio-economic hierarchies which he recognised as social inequalities and explain how they had an impact on history. For him history was the presentation in chronological order of successive developments in the means and relations of production. Historical study therefore did not stop with chronological narrative but required the investigation of many interrelated facets. "Production" was not confined to just the economy and technology of the time but involved an understanding of the multiple aspects of a society that constituted its entirety.

I have chosen here only a few themes out of the many from his writing and which I think have been seminal to the study of early Indian history. Given the versatility of his historical interests it is difficult to make a selection but I have selected three. I shall be speaking on his discussion of the relationship between tribe and caste, on the link between Buddhism and trade and on the nature of feudalism in India. His discussions reflect not only his formidable grasp on Indian data but also demonstrate his readings in Greco-Roman and Medieval European studies, readings that validate the importance of comparative history. In referring to these three themes I would also like to mention the questions they raise and the ways in which these have come into discussion in subsequent studies.

1 Tribe and Caste

The relationship of tribe to caste was for him a basic historical process in India.⁵ His familiarity with this process drew on his readings of texts and his observations in the course of fieldwork. Additionally, it was important to his understanding of class confrontations. His focus was on the two ends of the social spectrum: the organisation of the brahmana 'varna' and the creation of the 'shudra varna'. The former was that of the highest ritual status and in later periods included the substantial number of recipients of grants of land.6 It was heterogeneous in origin although eventually it took a seemingly homogeneous form. The shudra varna, within which he included the 'dasas', provided the labour force and was essential to the definition of class. He compared this category as we shall see, not to Greco-Roman slavery but to the Greek helots. Tribes were distinct because they were not 'shudras' and neither were they slaves nor helots. They were a category outside caste and a pre-class formation. Tribe and caste were contrasting conditions. On occasion he equated varna with class but recognised situations where the equation did not hold.

The tribe was a community where land rights were derived from kinship relations and not from ownership. Rules controlled the choice of marriage relations partly because recruitment into the community was by birth. Partaking of food was generally within the community and contacts with outsiders were not encouraged.7 We can see here the process towards the creation of 'jatis' with some of the characteristics of the tribe continuing. Confrontation and negotiation were both used in converting tribes into castes. As a societal change this involved mutations in the economy, in technology - often in relation to the ecology, and in belief systems, all of which were important to Kosambi's historical explanations. He saw the fundamental historical change as resulting from the extension of plough agriculture and the establishing of agrarian villages in areas that had previously been tribal lands, supporting scattered societies of hunter-gatherers, shifting cultivators and pastoralists. This change brought about the transition from pre-class social formations to castes that suggested class.

In the context of these changing relationships, his analyses of rituals and of cultural practices and their historical context were particularly striking. Religious articulations were not just ideologies of the ruling class asserting hegemony. They were also ways in which status and control were negotiated and these could draw on more than economic causes.

Clan-based Society and the State

The relationship between tribe and caste society is sometimes reformulated today as that between a clan-based society and the state. The term "tribe" has come to be used casually if not loosely to cover many societies and has lost the precision it may once have had. It is used for a range of social forms from food-gatherers to sedentary cultivators. A tribe can even incorporate more than one caste, as for example, in the descriptions of the Abhiras in early texts.8 Clan is more specific and is also suggestive of the evolution towards jati as caste although this does not negate the importance of varna. In a jati, recruitment is by birth into the jati (as it was in a clan), rules of endogamy and exogamy govern marriage; where occupation enters the definition it tends to restrict identity; and belief and ritual can be bound by a jati or at least identified with a cluster of them. A significant change is that the relatively egalitarian status among clans is undermined by caste hierarchy.

Some continuity from the clan to the jati is discernible although it is not the same from clan to varna. This was a distinction which, in the writing of early Indian history, was underlined by Kosambi, although he did not discuss jati extensively in the context of caste. Varna as a category has not always conformed to the norms of the 'dharma-shastras' and more so in the middle social levels where the caste status of varieties of groups could be adjusted. If varna is equated with class the equation varied with the context. The many intermediate categories of jatis as described in the normative texts had ambiguous identities in a system where hierarchy and inequality was emphasised. Where varna claimed divine sanction, this gave it yet another gloss.

The preference for the term "state" rather than caste as the form of change has to do with the coming of the state bringing about a large range of changes of which the conversion to caste society is one, albeit an important one. It is also an indirect critique of the notion that in early India there was an absence of the state because it was encompassed by caste. The political formation of a state generally implies a kingdom although some historians include clan polities as state systems. Kautilya's well known 'saptanga' theory of the seven limbs that constituted a state are listed as a state requiring a king, a demarcated territory, ministerial administration, the storing of revenue in a treasury, a fortified capital, coercion which presumably could be physical or legal, and the presence of allies in the neighbouring kingdoms.9 Historians therefore look for processes that help in the establishing of states which subsume many changes, some being the ones discussed by Kosambi. The change from tribe to caste is a complex historical process. Kosambi was drawing attention to this complexity as well as to the fact that it was basic to much of historical change in India.

In the juxtaposition of tribe and caste or of clan and state, the encroachment on the tribe by caste society frequently resulted in its incorporation into the state. Apart from other factors this process also raises a number of questions on the etymology of words and consequently the interpretation of texts. Literal translations

may not convey the exact meaning and may require to be co-related with the background of the society to which they refer. For instance, how is the term "raja" to be defined in its initial usage: as the chief of a clan or as a king, since both were called raja. The Arthashastra uses the same term for both but the context makes it clear as to which is meant.10 The difference in meaning would alter the reading of the text. Kosambi used the meanings almost interchangeably, yet he was aware of the distinction. He quotes a phrase from the Rigveda, that Agni eats the forests as a raja does the 'ibhyas', to which he could have added the later quotation from the Shatapatha Brahmana of the kshatriya eating the 'vish', the clansmen, as the deer eats grain.11 The simile of "eating" does not convey the sense of awe associated with majestic royalty controlling subjects. Its association is more suggestive of activities of the raja in, for instance, conducting cattle-raids to acquire wealth as described in the Vedas. We are told that even the well-established Kuru-Panchalas go out in the dewy season to conduct cattle raids.12 These are a staple means of acquiring wealth in small societies, dependent on agro-pastoralism where protection by a royal army is absent or not forthcoming.

That this activity continued into later periods in rural areas is evident from the numerous hero-stones commemorating the hero defending the village cattle against raiders. In such situations there seems not to have been a reliance on royal authority and defence was organised locally. Some heroes acquired immense status through this act of heroism and it is thought that they may even have been deified, as in the suggested origin of Vitthala at Pandharpur in Maharashtra. Historians of early India who are investigating such cultural flows are in part pursuing Kosambi's insistence on investigating "living prehistory".

In terms both of continuities and of social origins the relation between clan and caste also features in Kosambi's discussion on the 'gotra' system among brahmanas.¹³ This was a subject of debate with Indologists such as John Brough.¹⁴ Myths of origin pertaining to 'rishis' such as, Agastya and Vasishtha, said to have been born from jars were analysed as referring to much more than what the narrative suggests.

The Aryan Question

Writing on what is often referred to as "the Aryan question", Kosambi accepted the then current theory that Aryan speakers invaded India after the decline of the Harappan cities. However, he argued that there was an interface between the various communities – old and new. This conditioned the resulting cultural forms many of which are articulated in the Vedic corpus. The interaction is reflected in changes in the Indo-Aryan language and religious beliefs and rituals. It can also be seen in the emergence of new social groups.

For example, Kosambi pointed to the merging of Aryan and non-Aryan in linguistic usage and its reflection in particular caste identities. Brahmanas such as the much-mentioned Kakshivant among others, referred to in the Vedas are said to be the sons of 'dasis', i e, of 'dasa' women. This was a significant statement. Described as 'dasyah-putra brahmana', in some ways an oxymoron, it was nevertheless a known category, initially reviled but soon respected by other brahmanas. 15 Thus, Kavasha Ailusha was first

dismissed as being the son of a 'dasi' but when it was found that the Sarasvati followed him wherever he went, his eminence was conceded. This was the triumph of such brahmanas. Despite being of ambiguous caste they could be inducted into the brahmana varna. Such inductions are parallel to the legitimising "new kshatriyas" in post-Gupta times. Kosambi suggests that some from this category may have derived their vocation from what survived of the Harappan priesthood but this suggestion remains speculative. Kosambi was demonstrating the difference between the continuity of the formal structure of caste and the malleability of the functioning of caste which could contradict the normative codes.

Changes in Meaning

This raises a further question: can we understand the nature of the Aryan-non-Aryan interaction (if we choose to call it that), through observing changes in the meaning of certain terms, as for example, dasa? As described in the Rigveda, the earliest of the Vedas, the dasa was in effect "the Other" of the 'arya'. Inevitably what constitutes Otherness or being alien, is a reflection of the Self, if in nothing else then at least in the characteristics that are chosen to represent "the Other". Neither the arya nor the dasa societies were homogeneous, unified and monolithic. Societies and communities never are. Some dasa chiefs were arch enemies of the aryas but a few seem to have been patrons of the brahmanas.

The dasas are feared because they are wealthy and their strongholds cannot be easily overcome. Their Otherness lay in distinctions based on language, ritual observances, custom and perhaps, as some have argued, even appearance.¹⁷ Their numbers seem to be exaggeratedly large. Possibly the fear is also because they are associated with sorcery - 'yatudhana'. Relations with the dasas change after a few centuries when in the later Vedic compositions they are regarded with contempt unless proved otherwise, as in the case of the Kavasha Ailusha and other such brahmanas. The status of the dasa had gradually been lowered and they now provided labour although the ritual specialists among them may have got a foothold into brahmanical ritual. The process by which this change occurred needs to be investigated in greater detail. How did the dasas, previously feared now become a group of bondsmen? It would also point to a change in the meaning of dasa, shifting from "the Other", to "the subordinate one".

The understanding of these kinds of changes, in terms of the interaction between the varying societies that existed in the north-western subcontinent at that time, introduces new questions and is far more helpful to explaining that period of history than the obsession with who was indigenous and who was foreign. The debate on the latter pays little attention to ascertaining whether the consciousness of being indigenous or foreign had any meaning for those societies. Recognised boundaries were non-existent. Therefore the differences between "us" and "them" were based on other features such as language, cultural patterns and belief systems, as also on negotiating hierarchies of status.

Kosambi had suggested that plough agriculture, iron technology, the use of the horse for mobility and a dependence on cattle

for food, were among the crucial factors that gave the Aryan speakers an edge over other societies. This allowed them to become the dominant culture. Plough agriculture weakened clan solidarity and allowed caste to become the agency of control over land. But the archaeological evidence for plough agriculture from more recent excavations goes back to pre-Harappan times and therefore prior to the presence of Indo-Aryan speakers. If the arya-dasa relationship was between pastoralists and agriculturalists — as seems likely — then a different set of indices would also have to be analysed.

Use of Iron Technology

The introduction of iron technology dated to the second and first millennium BC in addition to the existing copper and bronze, is said to have facilitated the clearing of forests to extend the area under cultivation. Subsequently the surplus from agriculture led later to the establishing of urban centres. But iron technology in itself is not a sufficient factor of change. The archaeological presence of iron varies from region to region and in some places dates to the second millennium BC. At some Megalithic sites in the peninsula it is prior to or contemporary with the presence of Indo-Aryan speakers in north India. Indo-Aryan was not the language in the more southern of the sites. The wide distribution of Megalithic sites was discovered subsequent to Kosambi so he did not know of it. The important question is not just the introduction of iron technology but the manner in which it might have been appropriated and used by those wishing to establish their authority. The locations of sources and the treatment of the metal - forging or smelting - and the function of artifacts would be helpful in understanding the nature of the change brought by this technology. Similarly, the production of a surplus from agriculture in itself is not sufficient to bring about urbanisation. Surplus is a process and has to be directed towards change as is done by those who use it as a resource. The crucial questions in Kosambi's argument were who controls the technology and who works it. These questions still remain relevant.

The interaction between tribe and caste is an essential factor of historical change. But this was not the only social mutation in history. Parallel to this was the expansion of exchange relations from barter to commerce to which Kosambi drew attention. Trade introduces the dissolution of tribal bonds and the earlier nature of exchange which changes could encourage the coming of a class society. He brought into his study not only the geographical expansion of commerce in the post-Mauryan period but also its links with Buddhist monasteries particularly in the Deccan and their patronage from a wide cross-section of people.¹⁹ This became another perspective of the mutation of tribes into complex polities. Where monasteries were linked to trade they signalled not only the presence of commerce but also of craft production and degrees of urbanism, not to mention an extension of agriculture, to support the commerce. Barter is more often associated with clan-based societies and can be transformed into commerce with the coming of the state and with extensive trading links. An obvious index of commerce as different from barter is the presence of coins as a common unit of value. This could also point to an increase in commodity production.

Numismatics

Kosambi's work on numismatics was closely related to his professional training as a mathematician. He used the logic of mathematics to formulate his questions and statistical methods to examine the data. This was new in the study of coins. The coins circulating in the subcontinent during the earlier period were what have come to be called, punch-marked coins. These were small roughly square or rectangular shaped coins, largely of silver and some of copper that had a cluster of symbols on one side and small marks on the reverse. The coins coincided with the evolution of early historical urban centres in the Ganges plain and the north-west. They were in circulation from a little before the second half of the first millennium BC to approximately the end of the millennium. The challenge that they posed was that unlike later coins, they were neither dated nor did most of them carry an indication of the issuing authority. Only a small number carried the legend, 'negama'. Therefore, the basic questions were: what did the symbols represent, who made the small reverse marks and was there a way of separating the older coins from the later?

Observing that the coins, mainly of silver, were cut with accuracy and that some came from hoards such as one from Taxila, Kosambi decided to use one such hoard as his basic data.20 A hoard would provide more reliable statistical data than stray finds. There was the further advantage that the terminal date of the hoard was known from the presence in it of a few dateable post-Mauryan Indo-Greek coins. Of the punch-marked coins some would have been in circulation for a longer period than others with a greater wear and tear. Kosambi argued that there was an age-weight co-relation and that by measuring the weight with exactitude he would be able to provide a chronological flow from earlier to later coins. This he did meticulously. He then went on to study the distribution of the symbols and to interpret what they represented. The commonly used crescent on arches was read by him as a Mauryan symbol suggesting the name Chandragupta. His readings for dynasties and kings are debatable despite the logic of his reasoning, but the idea of using a statistical method in the study of coins is worth pursuing where possible. The other feature was that of the reverse marks. It had been thought that the coins were issued not by kings but by traders. The coins inscribed with the legend, negama, perhaps referred to an exchange centre or a guild-like institution. Kosambi maintained that the reverse marks were made by traders who, from time to time, checked the weight and value of the coin and marked it. Some of the marking could have been that of the state superintendent such as the 'lakshanadhyaksha', the examiner of coins whose functions are described in the Arthashastra.21

In the course of examining the coins he discovered that some were debased. Using the chronology of age-weight statistics he maintained that the debasement dated to the late period of Mauryan rule. Co-relating this with references to double cropping in the *Arthashastra* and to state supervised agriculture, he maintained that the decline of the Mauryan Empire was due to a fiscal crisis and a pressure on Mauryan currency and by extension on the economy. The pressure came from the huge expenditure on the army and the administrative infrastructure. This would be supported by the salary scales listed in the *Arthashastra*

weighing heavily in favour of the upper bureaucracy.²² Kosambi also pointed to the expansion of trading activity involving money transactions, which, if there was a shortage of silver could have led to debasement.²³ Not all these arguments have been accepted but his focus on a crisis affecting imperial power can provide new dimensions to investigating the nature of Empire. This was a much needed departure in the discussion on the causes of the decline of kingdoms which was generally attributed to the predictable "foreign invasions". New aspects of the study of state systems were now introduced.

By way of an aside one could ask why Kosambi who used his knowledge of mathematics to great effect in the study of numismatics did not combine his expertise in mathematics and history to write a history of mathematics in early India. If there was anyone in India qualified to initiate a Joseph Needham-like project on science and civilisation in India, it could have been Kosambi. Was it his commitment to writing a Marxist history of India founded on studies of society and the economy that kept him from a history of mathematics? Even commentaries on the major mathematical texts would have been illuminating as have been his editorial comments in editing works of literature and which have since become standard editions.²⁴

2 Buddhism and Trade

At the time when Kosambi was writing, the data on trade was more limited than it is now. Trade routes that ran from the northwest with a hub at Taxila were known from the Greek sources of the Hellenistic kingdoms in west Asia and some Latin sources of the Roman Empire, and through limited archaeological data. Some routes went westwards to the eastern Mediterranean, some went south-eastwards to the Ganges delta and some crossed the Vindhyas into the peninsula. These provided links between networks of cities from Maurya to Gupta times. That there was a vigorous trade was well-established and there was much coming and going between people from numerous places. This was exemplified in the emergence of styles of architecture and sculpture and by reference to what were probably dialogues on matters pertaining to astronomy, mathematics and medicine, all of which constituted the knowledge systems of that time. Each of the religions of the traders started to refer to a saviour figure - St John of the Revelations among Christians, Shaoshyant of the Zoroastrians, the Buddha Maitreya and the coming of Vishnu as Kalkin. This was a remarkable conjunction of ideas.

Trade with the eastern Mediterranean as treated in earlier studies was regarded as primarily land-based and relatively less attention had been given to maritime trade. The last few decades have seen extensive evidence on maritime trade and consequently new studies. Archaeological data indicates the presence of traders from the eastern Mediterranean in India and inscriptions on potsherds found at port sites in the Red Sea provide evidence of Indian traders. ²⁵ Merchants from Alexandria financed ships and cargo to travel from the Red Sea ports to the western coast of India stretching from the Indus delta to Kerala. A careful use of the south-west monsoon winds enabled ships starting out from the Red Sea and particularly from close to Socotra to cross the Arabian Sea. The cargo they took back was substantially of

Economic & Political weekly EPW JULY 26, 2008 47

pepper and spices and some textiles.²⁶ The recent discovery of a contract in Greek mentioning trade with Muziris and more recently the possible discovery of what might have been the port of Muziris at Pattanam near Cochin, further underlines the importance of this trade. It also begins to be seen as a forerunner of the later pattern of trade with Arab, Jewish and other merchants from west Asia. The items in the early trade were paid for in Roman gold and silver coins, often freshly minted. The coins have been found in hoards and in settlements scattered across the peninsula with a concentration in the south.

Roman Trade

This Roman trade, as it is called, began tentatively in the first century BC, peaked over the millennium change, and continued to be relevant to the economy particularly of peninsula India until about the mid-first millennium AD. It has been suggested that the mutation of the chiefdoms of the south – the Cheras, Cholas and Pandyas – into kingdoms was in part due to their participation in the economy of this exchange.²⁷ Apart from Roman coins, some small Roman objects turn up at excavations in the peninsula. This was a trade that touched many centres and among these were Buddhist monasteries.

As compared to 40 years ago we now have evidence of a network of monasteries almost covering the Deccan. They come down seriatim along the east coast with a cluster in the Krishna delta, the epicentre being Amaravati. The sites suggest a coastal route and their even spread may indicate a form of looping trade. In the west, there is a cluster around the Sopara area. But further up and down the coast they are located more inland and at greater distances from each other. As Kosambi noted the monasteries stand like sentinels at the passes that lead down from the Western Ghats to the narrow coastal plain. Communication was gradually beginning to extend further afield in the Deccan as is evident from archaeological finds and references to place names in the inscriptions at Buddhist sites.

Focal points of trading activities in the Deccan tend to coincide with the location of Buddhist sites. Recently a 'stupa' has been excavated at Kanaganahalli near Gulbarga in Karnataka which further confirms these connections.²⁸ In structure and form, it is similar to stupas at Sanchi and Bharhut and dates from the second century BC to the third AD. Its location - almost at the mid-point between the delta of the Krishna and the western Deccan - suggests that traffic came along the Krishna valley and then travelled up the Bhima valley. Both valleys are revealing new Buddhist sites. Votive inscriptions from sites on the western side, recording donations from householders, largely traders and artisans, occasionally refer to kings, usually a Satavahana king. The paleography of the inscriptions is similar to that of the western Deccan caves at Junnar and Nasik. Narratives in low-relief carry occasional hints of east coast contacts, although themes with a Buddhist context would be similar at many sites.

Kosambi's book has a telling photograph of pack-animals which to this day carry goods down the incline towards the coast – a picture that has not changed much in the narrower gullies of the ghats. Controlling both coasts of the Deccan was the ambition of many kingdoms of the peninsula as this would have had a

tremendous advantage in providing access to the west Asian and south-east Asian trade.

Kosambi had linked the rock-cut cave sites of the western Deccan with this trade and was proved to be right when the evidence for the trade increased and the links between traders and Buddhist monasteries came to be more closely established. He was interested in the activities of Buddhist monks and lay followers as suggested to him by his father's work on Pali sources.29 Dharmanand Kosambi had drawn attention to the multifaceted information in Buddhist texts where narratives and commentaries on 'bhikkhus' and 'upasakas' depicted their lives in a background that included more than discourses on 'dhamma'. That there was the direct participation of many monks in trade is becoming apparent from recent studies of the early Buddhist texts and the votive inscriptions at monastic sites.30 The monasteries therefore were not just staging-points for travellers on a long journey, but some could even have been the nuclei of commercial activity. Guilds of artisans, merchants, small-scale landowners and some local royalty were donors as were members of the Sangha among whom, apart from monks, were quite a few nuns.

Inscriptions in the cave monasteries of the Western Ghats also record another kind of nexus. Guilds of craftsmen received endowments from royalty, the interest from which was used on the welfare of the monks.³¹ The reorientation of the economic aspects of religious institutions such as monasteries continued into later times and included large numbers of temples. This was an interface between society, economy and religion that had not previously elicited detailed study but is now regarded as an essential part of the history of religions in India.

3 On Modes of Production and Feudalism

The question of trade and urban growth is also important to another aspect of Kosambi's view of Indian history, namely, the question of whether India experienced a feudal period and if so what form did it take. Kosambi's focus was less on the general nature of feudalism as formulated for Europe and more on Marx's theory of the feudal mode of production. The debate among Marxist historians in India at that time highlighted the question of whether the modes of production that Marx had formulated for Asian and European history were applicable to the Indian past. The Asiatic mode of production, which Marx had based in part on 19th century European ideas of Oriental Despotism, could not be applied directly to Indian historical evidence. The supposed absence of private property in land, the infrequency of commerce involving cities, the notion of an unchanging village community, were preconditions contradicted by Indian sources. At most some elements of this construct could be used in analysing a few aspects of early societies but Kosambi did not regard it as an explanatory mode for early Indian history. If caste is class at a primitive level of production then presumably there would be some class contradictions for there to be a subsequent stage of history, but this seems not to happen in societies said to be characterised by the Asiatic mode.

Marx had formulated the dialectic for European history based on various stages of change in the means of production. Of these, the slave and the feudal modes of production were thought of as possibly relevant for the history of early India. An attempt was made by S A Dange, in his book, *From Primitive Communism to Slavery*, to argue for a slaved-based economy for the ancient past.³² Kosambi's critique of the book pointed out the flaws in the reconstruction of etymologies as also in the use of sources and others that followed from conforming mechanically to a given view of what was thought to be the historical materialism of Marx. Attempting to fit the evidence to a particular framework showed a lack of analytical thinking.³³ For Kosambi, analytical thinking was a primary requirement especially in considering variant forms within a Marxist framework. Marxism he said was not a substitute for thinking.

Slaves in Indian Context

Slaves are of course referred to in Indian sources as dasas, but these were largely domestic slaves and were not generally the primary providers of labour in production. The large-scale use of slaves in agricultural and craft production as in some Greco-Roman economies was replaced in India by shudra labour and shudras were technically not slaves. The monopoly of the state over basic production in the early period allowed the absence of chattel slavery. Kosambi suggested that the Greek institution of helots, not found extensively in Europe, could provide a more appropriate parallel.³⁴ Helots were a community of families, enslaved collectively as a group. They had well-defined military obligations and provided a fixed tribute to the city-state of Sparta where the system prevailed.

The category of slave was different. It applied to individuals who came from diverse communities and locations but had a common function as unfree labour and were privately and individually owned as chattel-slaves. The difference was even more marked in the Roman economy where slave labour was essential to the produce of the huge latifundia, the size of which as farms and estates with single ownership are not met with in early India.

The 'shudra varna' according to the dharma-shastra texts, consisted of communities that provided labour generally in the form of cultivators and artisans but were not individually owned. Unlike the helot the cultivator had no military obligations. This is also attested to by Megasthenes who wrote on Mauryan India in the late fourth century BC.35 A shudra, where he was cultivating state-owned land, paid a tax to the state.36 The equation of shudra with helot could therefore at best have a limited application. In the period subsequent to the Vedic, the shudra caste had diverse roles. Puranic sources described some dynasties that they disapproved of such as the Nandas and possibly their successors, as of the shudra varna. Various mid-level professions in the post-Mauryan period were sometimes described as being of the shudra varna. The possible shudra-helot equation was not central to Kosambi's studies of shudras. Nevertheless, his idea that the structure of caste society was such that it could demarcate a particular community to permanently provide labour becomes more evident with untouchables emerging as a source of labour.

Feudalism from Above and Below

Kosambi argued for a feudal period of Indian history dating its start to the later half of the first millennium AD and continuing with variations into recent centuries. He saw it as evolving in two

phases: feudalism from above and feudalism from below.³⁷ Feudalism from above was the initial phase when a powerful king ruling over lesser kings and chiefs, received taxes from the latter who even if politically subordinate continued to control and administer their territories. Subsequent to this there emerged feudalism from below. This was enhanced through a system of grants of revenue by the king largely to religious beneficiaries individuals and institutions - and to a more limited extent, the upper bureaucracy. This also led to the categories of 'agrahara' grants to brahmanas as also grants to temples and to Buddhist 'viharas' although the latter were less frequent. The grant related to specific lands. The revenue was not collected in order to be paid primarily to the king who had initially granted the land, but more as an income for the grantee. This created a body of powerwielding intermediaries between the peasant and the king especially when the grant of revenue in perpetuity came to be treated as ownership of the land.

Although the gifting of land and villages is mentioned in earlier times it was only occasional. The Mauryas for instance had crown lands – the 'sita' lands – some converted from waste land and worked by shudra cultivators. Tenancies of various kinds are listed in the *Arthashastra*.³⁸ From the later first millennium AD, the granting of land by the king became a more regular administrative and economic pattern. The intermediaries between the peasant and the king could exploit the peasant and also nurture aspirations of setting up small estates as the nucleus of later kingdoms. Many grants also gave judicial and administrative rights to the grantee which freed him from both the village administration as well as responsibility to the king.

Where the grant of land was in forested areas, the forest-dwelling tribes/clans could be converted into shudra peasants. This was perhaps a more common aspect of the mutation of tribe into caste or the incorporation of a clan-based society into a state system. The pattern was likely in areas newly cleared of forests adjoining kingdoms or where kingdoms were established for the first time. The change is evident from various sources, some being inscriptions recording the grant, and other texts such as the *Harshacharita* of Banabhatta. The system within which the change occurred was different in the post-Gupta period from the Mauryan when the state regarded forest-dwellers as a threat.

The assumption of virtual ownership of the land so granted led to the grantees claiming superior status and if they later established kingdoms some claimed to be kshatriyas. They underwent rituals that conferred this status on them and had genealogies composed to confirm it. Whereas in earlier times brahmanas, vaishyas, shudras, could all establish dynasties, now those in power began to assert a kshatriya identity irrespective of their actual caste origins. Political power and kshatriya status would seem to have been an open category.

'Indian Version' of Feudalism

The question of whether or not there was an Indian version of feudalism has been debated for some years.³⁹ Some have critiqued what they thought was too literal an application of the feudal mode of production. Kosambi argued that the Indian version did not conform to European feudalism since, among the

features of difference there was an absence of demesne-farming on a substantial scale on the land of the vassal by those compulsorily made to labour.⁴⁰ This involves questions of serfdom, the manorial system and the contractual element in the relations between king, vassal and serf. It was also pointed out that neither trade nor cities had declined in many parts of the subcontinent as was a requirement in some models. Maritime trade continued and its impact needs to be assessed together with the commercial economy of its hinterland. It has been argued that the use of money in exchange transactions was not minimal.⁴¹ There was also the need to recognise and explain regional variations.

In pursuing these questions, other patterns have been suggested on the formation of states, on the mutation of clans into castes, the administration of agrarian economies and the inter-weaving of local religions into the forms taken by the more wide-ranging Puranic and other sectarian movements. Alternate reconstructions refer themselves largely only to what has been called the Early Medieval period. They are not theories of explanation that follow from earlier formations and the changes these bring, as is envisaged in the theory on modes of production. Yet the earlier formations would have to be considered in a discussion on what constitutes the Early Medieval.

The period prior to the Early Medieval is generally referred to as the Early Historical. There has been scant attention given to formulating a descriptive label for it or even suggesting a distinctive pattern. The projection of a single period from the sixth century BC to the sixth century AD is problematic. It might be more appropriate to treat the lead up to empire and the Mauryan Empire as one continuum and the post-Mauryan as another, where in each case, the evolving of the state and the accompanying social and economic changes seem to take different forms in relation to the nature of the state, the political economies, the functioning of castes and of religious sects with their variant ideologies. In what way were these the precursors to the pattern of what is called the Early Medieval state? Endorsing the feudal mode without explaining the mode for the preceding period does not explain the dialectic that led to the feudal mode. Nor do labels such as Early, Early Historical, Early Medieval, Medieval, which we all use regularly, convey much in terms of the dynamics of a period of history. They are at best chronological parentheses.

Europen Models

Part of the problem in the debate on feudalism has been the focus on the models chosen based on the study of feudalism in Europe by historians such as Marc Bloch and Henri Pirenne, or the model as presented by Marx. Recent writings on medieval Europe range from a questioning of feudalism as a concept,⁴² to arguing for the

An appeal from Ekta Parishad

Ekta Parishad has been leading the movements on the land question in different parts of the country for more than a quarter of a century. After its long march, in October 2007, JANADESH, from Gwalior to Delhi, in which close to 30,000 landless peasants participated, the Ministry of Rural Development, Government of India constituted the "National Council for Land Reforms" headed by the Prime Minister, and the "Committee on State Agrarian Relations and the Unfinished Task of Land Reforms" headed by the Minister of Rural Development, to address a whole range of issues relating to land and expedite socially and economically just solutions.

The Terms of Reference (ToR) of the above mentioned Council and Committee are available at the following links:

www.janadesh.net

www.ektaparishad.org

Ekta Parishad is providing research support to several members of the above mentioned bodies. This is to request all those who may be interested in sharing information and analysis, with respect to any of the issues in the ToR of the said Council and Committee, to send the same to Mr. Ramesh Sharma at the following electronic mail address:

ektaparishad@gmail.com (Attention: Ramesh Sharma)

Information may also be sent to Mr. Praveen Jha, faculty member at the Centre for Economic Studies and Planning, Jawaharlal Nehru University who is a member of the above mentioned Committee, at the following email ID:

praveenjha2005@gmail.com

The Committee has to submit its report soon, hence the relevant information may be submitted by 20th August, 2008

validity of variant forms within the framework of feudal societies.⁴³ These are substantial contributions to the debate on feudalism in Europe. Nevertheless they also have a relevance to the question of feudalism elsewhere. Comparative history drawing on variants can hone the debate.

Kosambi's writing as a paradigm shift is evident in the questions he asked of the sources and in his attempts to answer them. This required a rigorous analysis of event and person in a historical context that extended beyond chronology and dynastic history to the social and economic mainsprings of societies and cultures and the interface between these various facets. His explanations of the historical process made visible many areas of investigation that had not received attention previously and the kind of new questions that can be asked of the data.

In the themes I have discussed each touch on different aspects but are nevertheless interlinked. The discussion on the mutation of tribe into caste registered the change from a pre-state society to state systems, from pre-class to varying elements of class and introduced a new dimension to the history of caste. Initiating discussion on Buddhist monasteries and commercial activities, Kosambi raised the issue of the socio-economic functioning of the institutions of religions, characteristic of all religions. These changed with historical change and fostered particular forms that identify religions from their social perspective. In his discussion of feudalism in India we see a historian investigating and co-relating diverse aspects of society and not limited by adherence to particular historical explanations.

Many of the methods of Kosambi's analyses are substantially valid even 50 years later. Some need reconsideration either because of new evidence or because of new theories of explanation

or because the overall perspectives of the past are today, differently nuanced. His intellectual perspectives and sensibilities were inevitably of his own times. Up to a point they carry traces of both the idealism and the dismissals of those times. He insistently asserted his autonomy from the clutches of contemporary orthodoxies, both of the Left and of the Right. The past was not to be used as a mechanism of political mobilisation as it has increasingly come to be among some in our time. The sources that inform us about the past have to be meticulously analysed and subjected to a rigorous methodology irrespective of their status or the authority they command. Kosambi would not have maintained that his analyses were permanently valid. He would undoubtedly have agreed that the advance of knowledge was dependent on a constant critiquing of existing explanations (even his) in an effort to arrive at greater precision. The latter may however have come after heated debate!

Mathematics and not History was his primary discipline. However, the mind of the mathematician is evident not only in his application of statistics to some kinds of data, but even more in the search for clarity in organising the data and the logic of the argument. There were times when he was adamant in his views, but even disagreement could extend the debate since this would occasion new thoughts and new ideas in pursuit of a question. Re-reading Kosambi – and he has to be read more than once – is to experience each time the thrill of being provoked into thinking historically. But his thinking was not limited to the historical alone. It was enveloped by the perceptions of a firmly independent intellectual with a remarkably creative mind.

NOTES

- 1 D D Kosambi, Combined Methods in Indology and Other Writings, Delhi 2002, B D Chattopadhyaya (ed), henceforth CMI.
- 2 R Thapar, 'Decolonising the Past: Historical Writing in the Time of Sachin and Beyond', *Economic & Political Weekly*, April 2, 2005, XL, 14, 1442-48; R Thapar, 'Historiography' in *Cultural Pasts*, Delhi 2000, 1-173. 'The Contribution of D D Kosambi to Indology', 52-73.
- 3 The culmination of such standard histories were the volumes in the series called *The History and Culture of the Indian People*, published by the Bharatiya Vidya Bhavan, Bombay.
- 4 'Combined Methods in Indology', CMI, 3-29.
- 5 The Culture and Civilisation of Ancient India,
- London, 1965, 172. Henceforth *CCAI*.

 6 'On the origin of Brahmin *Gotras*', *CMI*, 98-188.
- 7 D D Kosambi, Introduction to the Study of Indian History, Bombay, 1956, 24 ff. Henceforth ISIH.
- 8 M R Singh, A Critical Study of the Geographical Data of the Early Puranas, Calcutta 1972, 128-132.
- 9 Arthashastra 6.1.1.
- 10 In the Arthashastra 11.1.5. rajan refers to the chief of a clan
- 11 Rigveda, 1.65. 4-7; Shatapatha Brahmana, 3.3.2.8; Aitareya Brahmana, 8.17.
- 12 Taittiriya Brahmana, 1.8.4.1.
- 13 CMI, 98.
- 14 J Brough, The Early Brahmanical System of Gotra and Pravara, Cambridge 1953. For Kosambi's

- response see, 'Development of the *Gotra* System', *CMI*, 170 ff, 178 ff.
- 15 ISIH, 97-100.
- 16 Aitareya Brahmana, 2.19; Kaushitaki Brahmana, 12.1.3.
- 17 R Thapar, 'The Rigveda: Encapsulating Social Change' in K N Panikkar et al (eds), *The Making of History*, Delhi, 2000.
- 18 ISIH, 106 ff; 'Stages of Indian History', CMI, 62 ff.
- 19 ISIH, 246 ff; 'Dhenukakata', CMI, 450-475; 'The Buddhist Caves of Western India', 476-481; 'The Basis of Ancient Indian History (II)', 327 ff; CCAI, 327 ff.
- 20 D D Kosambi, *Indian Numismatics*, Delhi, 1981. Ed by B D Chattopadhyaya.
- 21 Arthashastra, 2.12. 24-25
- 22 Arthashastra, 5. 3.
- 23 CCAI, 164-65.
- 24 Included among these are Bhartrihari, Shatakatrayam; and together with V V Gokhale, Vidyakara, Subhashita-ratna-kosha, HOL 44, Camb, Mass, 1956.
- 25 V Begley and R D De Puma (eds), Rome and India, The Ancient Sea Trade, Madison, 1991.
- 26 F De Romanis and A Tchernia (eds), Crossings, Eastern Mediterranean Contacts with India, Delhi, 1997.
- 27 R Gurukkal and M R Raghava Varier (eds), Cultural History of Kerala, Vol I, Thiruvananthapuram, 1999; R Champakalakshmi, Trade, Ideology and Urbanisation, South India 300 BC to AD 1300, Delhi, 1996.
- 28 Indian Archaeology A Review, 1996-97, 55; Ibid, 1997-98, 96.

- 29 ISIH, 174 fn 1.
- 30 G Schopen, Bones, Stones and Buddhist Monks: Collected Papers on the Archaeology, Epigraphy and Texts of Monastic Buddhism in India, Honolulu, 1997.
- 31 Nasik Cave Inscription No 12, Epigraphia Indica, VIII, 82-85.
- 32 S A Dange, From Primitive Communism to Slavery, Bombay, 1949.
- 33 D D Kosambi, Exasperating Essays, Poona, 1957, 3-4, 18.
- 34 ISIH, 104; CCAI, 81, 86.
- 35 Strabo, XV 1, 40.
- 36 R Thapar, Asoka and the Decline of the Mauryas, Delhi, 1997, 61 ff, 'The Mauryas Revisited' in Cultural Pasts, Delhi, 2000, 488 ff.
- 37 ISIH, 275 ff; 326 ff.
- 38 Arthashastra, 2.1.
- 39 R S Sharma, Early Medieval Indian Society, Delhi, 2001; T J Byres and H Mukhia (eds), Feudalism and non-European Societies, London, 1985; B D Chattopadhyaya, The Making of Early Medieval India, Delhi, 1994; H Kulke (ed), The State in India, 100-1700, Delhi, 1997.
- 40 ISIH, 326 ff.
- 41 J S Deyell, Living without Silver, Delhi, 1990.
- 42 S Reynolds, Fiefs and Vassals: The Medieval Evidence Reinterpreted, Oxford, 1994.
- 43 C Wickham, Framing the Early Middle Ages, Oxford, 2005; 'The Other Transition: From the Ancient World to Feudalism', Past and Present, 1984, 103, 3-36.

Towards a Political Philology: D D Kosambi and Sanskrit

SHELDON POLLOCK

D D Kosambi's engagement with Sanskrit was marked by an intense search for both a text-critical method and a theory for interpreting culture and power. His method was positivist but sophisticated in its positivism, and if recent work in the history of textuality (Indian and other) suggests that more attention to cultural difference is needed, his text-critical work remains foundational for further scholarship. His theory was positivist, too, in keeping with his vision of scientific Marxism, and if its strong universalism here produced a skewed interpretation that is now in all its essentials dead, he introduced a new and crucial critical dimension to Sanskrit studies. Perhaps the most remarkable (and most disturbing) realisation about Kosambi's quest for a political philology is that nearly 50 years after his death he has had not a single successor in India.

wo traits, as an ensemble, distinguish D D Kosambi in his work on Sanskrit not only from the scholars who were his contemporaries, but also from almost everyone since. The first is his search for a method in the editing of Sanskrit literary texts, and the second his search for a theory in the reading of these texts. In the former case, if judged by the practices of editing Sanskrit literary texts in India at the time, Kosambi emerges as a remarkable pioneer, his concrete accomplishments hardly in danger of being superseded anytime soon. In the latter, he is exceptional in the history of Indology for his awareness that the method of philology is always inseparable from a theory of philology, itself produced by a tradition of writing and reading, and from a cultural and political criticism specific to that tradition. If Kosambi's theory has proven to be flawed, we have only come to know the flaws and sought ways to overcome them because he had the courage to enunciate the theory in the first place.

How old fashioned, even quaint, it must seem to readers of the Economic and Political Weekly to find the word "philology" used in its pages, and how odd to see it coupled with the qualifier "political." But there is nothing quaint about what philology represents, at least according to its most robust self-understanding. This is not the shrunken and withered idea it conjures in the minds of many people today because of the shrunken and withered practice it often embodies, but rather a core human concern: the fullest use of the most human attribute, language, which occurs in the making sense of texts. Such is the conception Nietzsche once sought to promulgate. He conceived of philology as an active mode of understanding that directed its powers towards every kind of text, from weather reports to the "most fateful events", and he viewed it as deeply political as well, in his case as a crucial antidote to the dehumanisation of capitalist modernity, to the "age of work" in which we are now imprisoned more remorselessly than Nietzsche could ever have dreamt. In one of his most luminous passages he describes philology as

that venerable art which exacts from its followers one thing above all – to step to one side, to leave themselves spare moments, to grow silent, to become slow – the leisurely art of the goldsmith applied to language: an art which must carry out slow, fine work, and attains nothing if not *lento*. For this very reason philology is now more desirable than ever before; for this very reason it is the highest attraction and incitement in an age of "work" ...Philology itself, perhaps, will not "get things done" so hurriedly: it teaches how to read well [Nietzsche 1887: 11].

Although it may not always be possible to draw a perfectly straight-line between a philological method and a critical theory of culture and power, there is nothing odd in suggesting that

I am very grateful to Dipesh Chakrabarty and Sudipta Kaviraj for their comments on an earlier draft of this essay.

Sheldon Pollock (sp2356@columbia.edu) is at Columbia University, New York.

philology has political projects to achieve and political lessons to teach, which Kosambi knew, without perhaps making it fully explicit, and which many have since forgotten. This lesson, in its most fundamental form, is that we can actively make the future only because we know who we are and where we have come from, and we can only know these things – know the past – because we have learned the discipline of philology, "the great, the incomparable art of reading well."

1

Like every other human practice, making texts and reading texts are activities that are (as Karl Popper would say) wholly theoryladen: we neither could nor would do these things unless we had some sense of how to do them and why. As with every other practice, however, most of us tend to ignore the conceptual foundations of how we make and read texts. We just seem to do it. Philologists are the people who try to bring these foundations to consciousness, and to constantly test their validity. Although the history of philology globally viewed is actually co-extensive with the history of textuality, a new and critical - even sceptical and suspicious - philology came into existence in the early modern period, and did so, again, globally. Editors and critics in Europe from around 1400 to 1650, such as Lorenzo Valla, Erasmus, and (most explosively) Spinoza; the new historical philologists of late imperial China such as Yan Roju; and Indian grammarians and linguists such as Melpathur Narayana Bhattatiri in 17th century Kerala (for Sanskrit) and Siraj al-Din Ali Khan Arzu in 18th century Delhi (for Persian), put philology front and centre in their intellectual practice as each in his own way redefined such core questions as textual authenticity, canonicity, and the very historicity and sociality - the humanity - of language itself.1

Positivist Science of Philology

An outgrowth of this process was the positivist science of philology that reached its apogee in Germany in the second half of the 19th century. Pune in the mid-20th century, when Kosambi was working on his Sanskrit philological projects, was imbued with the spirit of this science: V S Sukthankar, general editor of the critical edition of the Mahabharata and mentor to Kosambi, had brought it with him from Bonn, where he had been a student of Hermann Jacobi. The textual method was that of Karl Lachmann, which posited (on the basis of the history of Greek and Latin texts) an orderly ramified descent of manuscripts from a stable authorial archetype [Timpanaro 2006]. Assembling all the manuscripts and determining what they held in common should in principle enable one to reconstruct that archetype. This was not a method without its challengers. French scholars, in particular, who worked with medieval Romance materials - troops in a philology war contemporaneous with the Franco-Prussian political wars of the period - encountered vastly different textual phenomena from those of classical antiquity. In such a textual world, where no chanson de geste may have ever existed in a stable original, variation was not accidental but constitutive: there was nothing but variation.2 Lachmann's crystalline sphere was already beginning to crack.

Prior to the Mahabharata work initiated by Sukthankar at the Bhandarkar Oriental Research Institute in Pune (this was to have been a European project, but it was scuttled after first world war), modern Sanskrit text editing was a relatively simple affair. Editors were typically traditional pandits who would print what was judged by some (usually unspoken) criterion or other to be the best manuscript; variants from other manuscripts would occasionally be recorded in footnotes but with no attempt to investigate the logic of variation. Such colonial-era practices arguably marked something of a decline from premodern times, under the constraints of print capitalism. But this is speculation; we have still no history of what might be called script mercantalism - the social-economic form of manuscript culture - let alone its relationship to and supersession by print [Pollock 2006a]. We do know that for centuries prior to the rise of the colonial printing industry Indian scholars produced thousands upon thousands of editions of Indian texts and published them. We may still have little sense of what "publication" meant in the premodern era, but we are coming to better understand the principles that traditional commentator-editors used to establish their texts - and there is no question they did edit, and on the basis of philological principles (including the recording of variants, or 'pathantaras') about which they were fully selfaware, if rarely fully forthcoming.3

Kosambi as Heir

Kosambi was heir, at least in part, to all this philological ferment, and his work represents a decided advance over anything his contemporaries had achieved, Sukthankar and his fellow epic editors aside. His engagement with Sanskrit poetry concerned two bodies of materials, one vast corpus and one more stable text, which are in fact intimately related, since both comprised poetry of the genre known as *muktaka*, the "isolate" or stand-alone verse that constitutes the bedrock of Sanskrit literary culture. The first and larger project was an edition of the poetry collection, *Sataka-trayam* (*st*) that has come down to us under the name of Bhartrhari; the second, an edition of the "Treasury of Literary Gems" (*Subhasita-ratna-kosa*, *SRK*) of Vidyakara, the oldest example of what was to prove an enduring genre of Sanskrit literature, the literary anthology.

Kosambi's involvement with the Bhartrhari corpus extended over more than three decades. The Epigrams Attributed to Bhartrhari appeared in 1948. This critical edition of the poems was preceded and followed by a series of editions of traditional commentaries on the text, either wholly or collaboratively edited by Kosambi (one by a Jain from western India, Dhanasara Gani, the oldest, if an often sophomoric, scholiast; a second, of very high quality, by Ramacandra Budhendra, possibly 17th century Andhra (the work was previously published and re-edited by Kosambi); a third by a south Indian commentator, whose name we now know to be Arkuttyalaya Balarama Kavi; the last by one Ramarsi, date and place unknown). Kosambi's concern with commentaries may in the first instance have been with their textual testimony, what they could say about the historical development of the Bhartrhari corpus. But in making them available he at least intimated an understanding (as classical

53

scholars of his day almost never did) of the importance of the history of the reception of the poetry, of changing reading practices – what I term vernacular mediations, those moments of edition-making or interpretation that constitute an essential second domain of a text's truths, beyond that of the putatively singular authorial one. What people in history have taken to be the truth (or in Sanskrit terms, *vyavaharika sat*) is as important as what may have once been *the* truth (*paramarthika sat*). What we want to know is the history of these truths, and the ways in which they made sense in their worlds – and we want then to *apply* (in Hans-Georg Gadamer's sense) the same analytic to ourselves, to understand what truth the text is making for us. Accessing these truths in all their variety and plurality is one of the great promises of philology.

It was, however, primarily to get at that one primordial textual truth that Kosambi studied 377 manuscripts of ST (out of a "conservative" estimate of 3,000 extant manuscripts), undoubtedly a larger number than has ever been used for any single text in the history of Indian literary criticism.4 He believed these could be divided into two grand regional recensions and some 12 lesser versions, an analysis that was a notable accomplishment in itself.5 What he found was not the orderly disagreement of manuscripts that classical philology had taught Sukthankar to expect. It was instead (as Sukthankar himself and his colleagues were to find, though to varying degrees, for the Mahabharata) the textual chaos of a beloved living tradition, where thousands of manuscripts diverge in the order of poems, their number, and their content, where the conflict between the "linguistic code" and the "bibliographic code" becomes utterly dizzying [McGann 1991: 48-68]. Kosambi could find only some 200 poems on which a sufficient number of manuscripts agreed closely enough to allow for inclusion in a hypothetical archetypal source ("Ur-Bhartrhari"). While clinging to a Lachmannian image of orderly dispersal – a neatly branching European oak - Kosambi seems to have felt that a banyan's controlled anarchy of aerial shoots and roots (Bernard Cohn's wonderful analogy) offered an arboreal figure far more pertinent to the Indian textual condition [Cohn 1985: 327].

I say "seems to have felt" since Kosambi never offered an explicit defence of his philological method - as opposed to his general, and far more innovative, interdisciplinary historical method - or an argument about Indian difference in the world of textuality, in order to trim the universalist pretensions of European philological theory. In fact, India reveals cultural processes that seem altogether inassimilable to that theory, in the same way we find it to reveal social and political processes inassimilable to European social or political science. We can observe how orality could thrive utterly unimpeded by the rise of literacy, so that in a work like the Mahabharata a wide spectrum of communicative media came to be sedimented over the centuries (some sections were transmitted entirely orally, others entirely in written form, and yet others in a mixture of the two, presumably in relation to their performativity); how regions tended to produce their own recensions of given works, with their own effective history, among which sometimes none evinces primacy; or how some genres were completely open to variation or expansion (the epics, for instance) while others remained almost completely closed (the *mahakavyas*, or great courtly poems).

Core Verses

All that said, the complex reception history of the Bhartrhari corpus still needs to be reconciled with a more familiar genetic history disclosed not only by a concrete core of stable verses – it is Kosambi's signal accomplishment to have demonstrated the existence of this stable core buried in the slag heap of tradition – but by an attribute more difficult to define yet no less real. There is something about those 200 poems, and more than a few of the 150 classified by Kosambi as doubtful, that marks them off from almost all other Sanskrit literature, a personal voice of the sort one hears only rarely, in Catullus, say, or Du Fu, or Heine. In the Sanskrit world no one – with the exception of a stray verse here of Bhavabhuti, or one there of Dharmakirti – wrote the sort of verses we find in the Bhartrhari corpus, such as this one:

I never rightly fixed my thoughts on the foot of God, to end rebirth, I gained no moral strength enough to force open the gate of heaven, not even in dreams did I embrace the full breasts of a woman – I did nothing but act as an axe to lay waste the forest of my mother's youth.

Kosambi himself was unable to reconcile this incontestable if maddeningly elusive authorial presence – what today would be called an almost confessional voice – with the complex history of the transmission of his work and the various identities of the author mirrored in that history: the indecisive Buddhist monk, the learned king, the wise ascetic, the Vedantic mystic. ⁶ But if anyone in the future proves able to do so, it will be because of the materials Kosambi provided.

The SRK presented a rather different kind of text-critical problem. There exist only three partial manuscripts of the anthology, though a large number of the poems it includes are represented both in the manuscripts of the works from which the poems were selected and in other later anthologies. (For many of the great Pala-era poets such as Yogesvara, the SRK, which was produced at a Pala-supported Buddhist monastery, is our only source - and their work is one of the anthology's great revelations.) Here the great contribution of Kosambi, along with V V Gokhale (1957), his collaborator, was, first, to have adjudicated with great care among the various readings in manuscripts often very difficult to read, printing the most credible version possible while respecting Vidyakara's authority, and, second, to have provided a historical catalogue raisonné, so to call it, of the poets included in the work. Although Daniel Ingalls, the translator of the anthology, was later to suggest more than 200 changes to the text, Kosambi's SRK stands as one of the most valuable works in the history of Sanskrit philology.

2

Why should Kosambi, a mathematician by training and a Marxist by persuasion, have cared about Bhartrhari's poetry or Vidyakara's anthology? Why did he almost drive himself mad editing the first ("Baba has nearly lost his mind in the work", says Jinavijayamuni

in the foreword), and spend so many of his productive years editing the second? He certainly developed a theory to explain the nature of this literature. But although as we will see this theory is in some way connected with his philological method, insofar at least as both show the same unquestioned commitment to positivist science and singular truth – there is one correct reading of a text, a society, a history⁷ – it does little to explain the nature of his deep involvement with the literature. On the contrary, it is hard not to feel that the two are in serious tension, and that the theory is a mechanical and ill-fitting adjunct to an inherited passion that long antedated it.⁸

Kosambi's cultural theory is only briefly enunciated in the Bhartrhari book, though it is trumpeted in the dedication – or more justly, the provocation – whose Sanskrit expression is meant to embody the very tension: nutana-manava-samajasya puras-caranam marx-engels-lenin-namadheyanam tejasvinam maha-manavanam punita-smaran-artham ("To the sacred memory of the great and glorious pioneers of today's society, Marx, Engels, Lenin"):

The dedication...is to the men from whose writings I first learned that society can and must be changed before we attain the stage at which human history will begin. The senseless bloodshed and increasing distress of our times are inevitable only because of the present class-structure of society; Bhartrhari's poetry of frustration provides at most an escape, but no solution [Kosambi 1948: 11].

The "literary physiognomy" of Bhartrhari with his "poetry of frustration" – Kosambi's characterisation of the powerful poem translated above, among others – is reduced in the introduction to *st* to that of a "miserable class", the brahmans, who shared his frustrations. Bhartrhari's popularity is attested by centuries-long reproduction of manuscripts across the subcontinent, copied not just by and for brahman elites but by kayasthas, Dadupanthis, Nath yogins, and a host of others across the social spectrum, including simple everyday readers, in vast numbers unknown for any other work of classical Sanskrit literature. Kosambi explains this rich complexity by a single fact, namely the growth of that class whose misery resulted from the contradiction of their status and their power, "the anomalous position of possessing knowledge of Sanskrit but no certainty of employment" [Kosambi 1948: 81].9

'Brahmanical Class Parasitism'

The introduction to the *SRK* presents the story of brahmanical class parasitism in a fuller form, but – and here I confess my surprise on revisiting work that so impressed me almost 40 years ago – with argument shallower than I remembered and a disdain that is almost Olympian. The line of thought is adequately signalled in the subheadings: 'The Basis of Feudal Sanskrit Literature', 'The Twilight of the Gods', 'The Social Functions of Literature'. Sanskrit, for Kosambi, was a language that had lost all contact with the sensuous world of "real life" in ancient India (some lives being apparently more real than others); it was purely an instrument of elite power and "legitimisation" of power. As for the actual life of Sanskrit in society, it is altogether tangential to Kosambi's analysis: Given that India lacks the records to write normal empirical scholarship since "the episodes and details are lacking", Kosambi can make a necessity of what to him is a virtue,

"to specify the basic theory" that would explain the data if we had it. This theory requires an analysis that "must therefore derive from the class divisions of every society in which literature was cultivated". The ruling class in India was not a rising class and hence could never view the interests of all as interests of its own; its poets, and the priests who were their confreres, could therefore never transcend the narrow sectional interests of the elites. No new classes inevitably meant no new literature, and this held true in India until the late colonial period (Bankim, Tagore, etc); preceding this were endless "centuries of dreary classical imitation, even in the vernaculars". As for the Sanskrit poets themselves, their work "necessarily" carried the stamp of parasitism and decay. This prohibited them from ever addressing "major problems of the individual spirit" or of humanity at large, and it condemned their works and biographies to near oblivion [Kosambi 1957: xlv-lxii].

3

There is no question that Kosambi sought to revitalise what he viewed as a moribund scholarly practice, and that for many students of the era and into the 1970s the work was electrifyingly transgressive – even to formulate a theoretical approach, of whatever stamp, to the field was unprecedented. What remains vital in this theory is another question, and to try to find an answer I examine it briefly on three fronts: its understanding of the social history of Sanskrit; its historical and economistic foundations; and its metatheoretical presuppositions.

"Neither [the Sanskrit] language nor [its] literature were for the vulgar herd", Kosambi asserts; "Sanskrit meant less to [the 'proletariat' of medieval India] than Greek to the soldiers of Marcus Aurelius" [1957: xli-xlii].10 Fifty years after Kosambi wrote this we have still a long way to go in developing an even remotely adequate social history of Sanskrit literary culture. But it is becoming increasingly clear that brahmans were not alone in writing Sanskrit poetry; Buddhists and Jains wrote it, too, studied it, taught it, and cherished it. And the social spectrum of secular Sanskrit seems to have been far wider than that: How else are we to understand verses from a 13th-century literary anthology that praise the Sanskrit poetry of a simple potter named Ghrona ("Caste is no constraint for those rendered pure by the Goddess of Speech") or that of a chandala named Divakara ("Ah, what power does the Goddess of Speech possess, that Divakara should have been a member of the literary circle of King Harsha, and the equal of Bana and Mayura").11 Manuscript colophons, a huge and (for social history) as yet almost untouched archive, give abundant evidence that the readership of Sanskrit far exceeded the bounds of Kosambi's "miserable class". The most varied testimony from later periods also tells a story incompatible with Kosambi's narrative. Consider just the Jain merchant Banarsidas' autobiographical Ardhakathanak (1641). Here he recounts how as a child he learned Sanskrit in addition to Prakrit and various vernaculars, that he studied a wide range of Sanskrit shastric materials, and translated a Sanskrit namamala into Hindi (it is extant, and dated 1613) along with a Jain Sanskrit work. Brahmans no doubt typically promoted themselves as the custodians of the language, but it is to swallow their ideology whole to equate

55

Sanskrit and brahmanism, as Kosambi, to say nothing of other far less critical scholars, invariably does.

'Feudalism' in Medieval India

Kosambi's sense of the "feudal" structure of medieval Indian culture-power, as it emerges from his literary-historical scholarship, affiliates him with the strong universalist tendencies of much Indian Marxist thought of the time, which held not only that Marx's social theory exhausted the possible forms of social life, but that every society was destined to experience all these forms in sequence, including what is most important for our present concerns, feudalism.12 Here is not the place to recapitulate the long feudalism debate that continues to choke the landscape of medieval Indian historiography like kudzu weed [Byres and Mukhia 1985].13 The contemporary literary or intellectual historian, however, would hardly hesitate before confessing that it has been singularly sterile. Its dust-dry shastric exercises over tax or rent, peasant or serf, class or caste are often completely a priori and devoid of any engagement with real empirical data and actual texts. They have little help to offer to those trying to make any sense of the real nature of polity or the character and grounds of cultural change. After half a century of discourse on feudalism, we still seem to have little idea about the political order in middle-period India. To repeat questions I ask elsewhere, "Was [it] segmentary in the African sense or feudal in the European? Did the polity consist of hierarchically parcellated authority with ritual hegemony at the centre, or did it wither away under vast transfers of wealth to a feudal nobility? Was the state the Great Beast, the Great Fraud, or the Great Drama?" [Pollock 2006: 6]. Moreover, participants in the debate often interpreted cultural production mechanically according to an inflexible economism and an equally dismal functionalism; as Kosambi himself put it, real history is the story of the development of productive forces; "any other type of history deals only with the superstructure, not with the essentials" [2002: 794]. If the model of feudalism was the way to restore to Indian culture-power formations something of their historical dynamism in order to erase the stain of stasis imputed by colonialism, these formations risked losing their specificity along the way. Why even bother to study them if we know in advance what they should mean? Kosambi's work shows this risk was real and present.

Finding precisely what theory prompts us to look for is a ubiquitous danger, one that engulfed communist politics, too, whose often uncritical "philology" similarly led to a search everywhere for what used to be called "the correct line". But the problem, and the irony, was doubled in the colonial context. Kosambi's historical theory unquestioningly accepts that the world works in uniform, law-like ways, and these laws have been discovered by western science. Equating as he did Marx with Carl Friedrich Gauss, Michael Faraday, and Charles Darwin, he would hardly have been prepared to allow that the social science developed out of the sociality of 19th century Europe was specific to that world (though good Marxist theory – with social existence determining social consciousness – would seem to require this radical historical difference), and therefore

Institute of Applied Manpower Research

Sector A-7, Narela Institutional Area, Narela, Delhi - 110 040, India Phone: +91(0) 11 27787080/27787213/27787214-18 Fax+91(0) 11 2778 3467 Email: india@iamrindia.org

Call for Application for participation in the Training Programme

The Institute of Applied Manpower Research, an autonomous organization under auspices of Planning Commission (established in 1962) announces the following training programmes:

Workshop on 'How to conduct Surveys: Cutting Edge Methodologies

Course Director: Rashmi Agrawal **Date of Programme: 10.09.08 - 12.09.08**

Fee per participant: Rs. 3,000 (residential) and Rs 2000 (non-residential) per person per day.

Perspective Participants: Public & Private organisations, Research organisations and research scholars from India and SAARC countries

Min. no of participants: 10

Training Programme on Planning for Superannuation

Course Director: Harsh Sharma and Anita Kakkar Date of Programme: 24.09.08 - 26.09.08

Fee per participant: Rs. 8,000 per person per day.
Perspective Participants: Senior level executives of Public & Private Sector

Min. no of participants: 10

Training faculties are of international repute.

Last date for receipt of application form: 12.08.08

Contact person: Dr. Rashmi Agrawal, Email: rashmi_agrawal56@rediffmail.com Phone: +91(0) 11-27787080

Nomination form can be downloaded from the institute website: www.iamrindia.org

not easily, and perhaps not logically, transposed across space and time. Yet scholars increasingly argue that the history of capitalism, let alone feudalism, produced no such uniformity or universalism, upon which a supposed science of history was in part to be built.¹⁴

Kosambi's general cultural theory and metatheoretical assumptions, to turn to my last rubric, are derived from the darkest and most undialectical period of Marxist intellectual history, Stalin's Diamat of the 1940s compounded with Plekhanov's earlier historical materialist vision of literary change. Here all cultural particularities and differences are dissolved in the universal solvent of class. Kosambi was not alone in this, of course; the "epistemic inability to see any stratificational kind other than class" is part of the history of Indian Marxism. 15 It is class alone that can serve as a diagnostic for the judgment about literature: what is to be accepted and cherished as accelerating the movement of history, what is to be denounced and discarded as retarding it. Kosambi's application of this theory shows all the flaws we have already met: anachronism, false comparison, misapplication of a social-science apparatus developed out of and for 19th century capitalist Europe to a non-capitalist Indian world; a proclivity for allowing theory to shape the interpretation of texts rather than to permit the evidence of texts to reshape theory, since our concern should apparently be less with what social actors did think and write than with what, in our theoretical view, they should have thought or written. There is a special impropriety to his arguments in the case of the SRK, however, with its remarkable "poetry of village and field," whose complex sociality Ingalls was the first to grasp though never theorise. Here are two of Ingalls' translations:

Somehow, my wife, you must keep us and the children alive until the summer months are over.

The rains will come then, making gourds and pumpkins grow aplenty, and we shall fare like kings.

* * *

The children starving, looking like so many corpses, the relative who spurns me, the water pot patched up with lac – these do not hurt so much as seeing the woman from next door, annoyed and smiling scornfully when every day my wife must beg a needle to mend her tattered dress [Ingalls 1968: 257].

This is poetry Kosambi cannot assimilate to his theory; it is dismissed as the "poverty of the intelligentsia", as if Brecht's poverty, or Villon's, or Cervantes', was not an intellectual's poverty [Ingalls 1954].¹⁶

4

Kosambi's philosophy, in contrast to his philology, was received with cold silence by cold war-era western Indologists, politically conservative as most were and constitutionally incapable of any theoretically informed response. Only Ingalls, his editor, paid him the courtesy of serious engagement. He too observed that Kosambi's ideas were specific to the world out of which they originally arose and faltered against the histories of China and India; that the standards of judgment he employed were entirely alien to the standards by which the poets measured themselves (Kosambi makes no reference anywhere to Sanskrit alankara and rasa-sastra, probably the most sophisticated discourses on the nature of literature in the premodern world); that culture is not always completely homomorphic with power (in his own words, "Must

we hate the intricacies of [the 10th century Sanskrit playwright] Murari because we hate the social system of his time?"). In the end, however, Ingalls was able to oppose to Kosambi's scientific pretensions only the disinterested interest of a Kantian subjectivist aestheticism: "The poetry of Bhartrhari remains beautiful and sometimes truly great," he wrote in reference to st; whereas in st he could only complain how unreasonable was the man "who will not listen to beauty until he knows that it comes from a new economic class", as if to "listen to beauty" were itself an entirely unmediated act, unaffected by history [1965: 51-53; 1950: 262]. ¹⁸

To ask what claims Bhartrhari or Sanskrit literature (or the Indian past as such) makes upon us here and now is indeed one of the most interesting if intractable puzzles that a historicist cultural criticism is compelled to confront, especially a Marxist criticism – after all, its first clear formulation is given in the *Grundrisse*: "But the difficulty lies not in understanding that the Greek arts and epic are bound up with certain forms of social development. The difficulty is that they still afford us artistic pleasure and that in a certain respect they count as a norm and as an unattainable model" [Marx 1973: 111]. Hegel posed the same problem earlier in a more lyrical vein in the *Phenomenology*:

A friendly fate presents [the works of classical antiquity] to us as a girl might offer those fruits. We have not the real life of their being – the tree that bore them, the earth and elements, the climate that constituted their substance, the seasonal changes that governed their growth. Nor does fate give us, with those works of art, their world, the spring and summer of the moral life in which they bloomed and ripened but only the veiled memory of this reality.¹⁹

How do philologists who retain a fundamental commitment to historicism and to grasping the relationship of culture and power – and who thus remain Marxists *après la lettre* and deeply sympathetic to Kosambi's project – respond to Marx's difficulty? How is it we actually want and are able to eat, and be nourished by, the fruit offered by Hegel's *phalwali*?

We cannot dissever a text from the world in which it originated. Philology demonstrates the truth of this proposition in every line we read - which becomes unintelligible in the absence of a grounded understanding of the language of that world, even in the case of a language like Sanskrit that sought to occlude its own grounding in space and time. And "world" of course means the whole world, not just other texts but the political conditions of the text's possibility. At the same time, we cannot deny a text's capacity to speak to us in the present; it is part of the history that has made us what we are, all of us (for texts do not respect the silly boundaries drawn and defended by cultural nationalists). Kosambi understated that capacity of the text, blinkered by his concentration on its historical origins, and a very partial, often anachronistic, and Euro-derivative view of those origins (unlike Marx himself, we should note, who was open to the pull of Greek works even though the society from which they emerged had been deformed by slavery); Ingalls understated the text's historical origins, blinkered by his concentration on its very capacity to speak to us still, while ignoring the fact that the claims of our historicity are not satisfied by pure subjectivism. Since our history is made up of and emerges out of that of earlier worlds, it is precisely in coming to understand them that we attain an understanding of our own historicity. Kosambi and Ingalls need each other,

57

therefore – perhaps this was the unacknowledged basis of their deep friendship²⁰ – and both in addition need the long and deep history that connects the text's and the reader's historicity, the sum total of vernacular mediations that constitute the full range of the text's truths.

5

Cultural Theory since Kosambi

What has happened to critical cultural theory in the 50 years since Kosambi's version of scientific Marxism? Everything. Any remotely adequate list would have to include Antonio Gramsci's rich studies of Italian language, literature, and history, and of course his ideas of hegemony (from the 1930s but made available only in the 1970s); Raymond Williams' cultural materialism that exploded the idea that culture was not a material practice, along with his concept of "structure of feeling" of the "deep community" above and beyond any given class; Louis Althusser's structural Marxism and the idea of culture as expressive product of a totality in contrast to the mechanical causal output of an economic base; Gadamer's historicist-antihistoricist hermeneutics with its understanding of "application" - the unavoidable historicity of the reader confronting the unavoidable historicity of the text (a concept that has a deeply radical potential often ignored due to Gadamer's cultural conservatism); Michel Foucault's new history of discourse, discursive formations, epistemic change and ruptures, and regimes of truth; Pierre Bourdieu's notions of habitus and field, which resolutely contest the reduction of culture to power; and perhaps above all postcolonialism, that omnibus term for all manner of resistance to western epistemic domination.²¹

Central to all this contestation is a set of ideas and urges that are not easily disentangled: a disenchantment with the claims of a science of man and a discrediting of its tall tales of directionality in historical change (emancipation, enlightenment, the various stages of historical evolution), and a scepticism towards the transhistorical validity of its conceptual categories (ideology, legitimation, the unconscious); a refusal to make the cultural simply epiphenomenal to the economic, social, or political; an awareness of the plurality of textual truths across historical eras, and of their historical truth beyond any simple correspondence with positive fact, in other words, the historical facticity of their imaginations and lies; a desire to find what is specific to local forms of life; and, increasingly, a rejection of systematicity and of the mechanical a priori application of theory, a willingness to challenge theory's omnipotence and omniscience with the realities of the particularities and messiness of history. The development of critical political theory and practice in India during the same period would show a similar decline of universalisms like Marxism-Leninism and the ascendancy, and success, of located - or in Sudipta Kaviraj's term, better translated - doctrines such as Ambedkarism.

Vitality of Political Engagement

Although Kosambi's belief in a single total theory is long dead, the political engagement that gave it life has gained vitality over the years. Culture and power are two sides of the same coin, and it is the task of a critical philology to read both - not just the texts of literature but the texts of the political, too. And what have we greater need of today, when the unconstrained power of capitalism (no less than its one-time alternative, state socialism) has brought the Earth as a whole to the brink of yuganta? Kosambi deserves to be celebrated for his readiness - especially in view of what was on offer at that time in the west, a timid formalism inside the seminar room and a virulent anticommunism outside to put on the table a set of critical questions and to try to find answers to them: Why do we, here and now, care about all that back then? What does it mean to us to study the past, what does it mean to our future? Kosambi believed, wrongly in my view, that we could in a sense know the answer in advance, whereby Indian data became just more raw material for the Lancashire mills of western science. Perhaps we have since learned that if the past is studied in a spirit of theoretical openness - and not as if we knew beforehand what it was going to tell us - it might teach us something we do not already know, and make once-old resources, of culture or power, newly available to us. Is there any greater inducement for the study of how the world was before capitalist globalisation has almost wiped the slate clean?

In raising the question of studying the past, however, we encounter one of the great challenges confronting the well-being of Indian scholarship today, one that would likely have astonished Kosambi himself: the cultural ecocide that has almost destroyed millennia-long traditions of language and literature. How are the pasts that produced us to be understood if no one can any longer read the languages in which they are embodied? It is not going too far to predict, I fear, that within a generation the number of people able to access the classical, medieval, or even early modern vernacular archive of India - in Bangla, Kannada, Marathi, Telugu, and so on - will have approached a statistical zero. This has already happened with Apabhramsha and the Prakrits, and real expertise in Indo-Persian is fast disappearing. As for Sanskrit, how saddened Kosambi would likely have been, despite his evaluation, to see this great tradition stultified in the bloodless teaching and bland research often practised in Indian colleges and universities, or captured and demeaned by the most retrograde and unphilological forces in the Indian polity, or, the worst fate of all, simply forgotten. In fact, the most pressing question to raise on the occasion of commemorating Kosambi's contribution to Sanskrit may be, not why he used this method or defended that theory - though it is not the least of his achievements to force such questions upon us - but rather why India has not produced any scholar to succeed him, and what if anything can still be done about it.

NOTES

- 1 This is a chapter in a still largely untold counternarrative to Foucault's historically and spatially foreshortened account of the "birth of philology" in Berlin c 1800.
- 2 See Bloch 1990; Hult 1991; Cerquiglini 1999.
- 3 Preliminary studies are Colas 1999; Pollock 2003: 111-14.
- 4 Kosambi certainly acknowledges the contribution of his collaborator, K V Krishnamoorthi Sharma, but the full extent of the pundit's labour is unclear to me.
- 5 It was challenged in part by Emeneau (1950).
- 6 While Kosambi felt that "a certain type of stanza came to be attracted to the collection" he remained convinced, as do I on a good day, that "the seeds must necessarily have been present in the original collection to permit such growth" (1948: 81).

- Ingalls, by contrast, felt that "the present collection, even the 200 'certain' poems, must contain poems by more than one poet" (1950: 260). In the end, it is one person's feelings against another's.
- 7 The same is strikingly true of Kosambi's European doppelganger, Sebastiano Timpanaro. His commitment to philological positivism was in itself a political commitment though one he seems not to have argued out anywhere. Timpanaro's last works, devoted to the history of the reception of Vergil in antiquity, thus aim to capture, not the vernacular mediations critical to our understanding of the plurality of truth in history, but rather the singular truth of the one "real" reading. See also Zetzel 2002.
- 8 I am not entirely sure of this passion though it seems self-evident from the work. On the other hand Kosambi's complaints about Sanskrit (e.g., "The Sanskrit language is so indefinite, with so many meanings for each word in literary usage ... that the same phrase can give a dozen different translations," 2002: 794) call to mind George Bernard Shaw ("I preferred Caesar, because his statement that Gaul is divided into three parts, though neither interesting nor true, was the only Latin sentence I could translate at sight").
- 9 An odd way to describe a putatively feudal formation.
- 10 Marcus Aurelius wrote his Meditations in Greek while leading his Latin-speaking soldiers in combat in the Balkans.
- 11 See Suktimuktavali, p 45 nos 69 and 70 (the anthology was well known to Kosambi).
- 12 Kaviraj 2008 gives a superb overview of the place of both "feudalism" and "class" in the quest for specifying the precapitalist Indian social form.
- 13 The debates continue with undiminished fervour, see Jha 2000, for example, and of course Sharma 2001.
- 14 "The problem of capitalist modernity cannot any longer be seen simply as a sociological problem of historical transition (as in the famous 'transition debates' in European history), but as a problem of translation, as well", [Chakrabarty 2000: 17]; see 46-71 for an analysis of the theorem of a uniform global history of capital.
- 15 Kaviraj 2008 is especially informative on the enduring political consequences of this conceptual failure. See also Chakrabarty 2000: 242-43, which documents with Kosambi's texts the problems his Marxism posed for his understanding of his own society in Pune in the 1950s.
- 16 Kosambi's sense of Sanskrit literary history was contradictory. His historical account of Sanskrit anthology poets was the best available at the time (1957: lxiii-cvi). At the same time he ignored the tradition of Sanskrit satire (1957: lx), and would reject out of hand remarkable works like the *Prthvi-raja-vijaya*, a powerful contemporaneous account of Prithviraja III that he dismissed as "feeble" (1957: xlviii).
- 17 "The personal political views that Kosambi expresses over the literary value of *subhasita*-poetry ...can be left aside. To be sure he has the right to present them, but we claim the right to ignore them" [Rau 1960: 81]; "This reviewer has however some doubts about the propriety of the insertion of sections 6-8 [in the introduction to *SRK*]. It seems to him that they are out of place and unnecessary for the analysis of this anthology" [Sternbach 1958: 318].
- 18 His interactions with Kosambi over the SRK introduction are detailed in Ingalls 1974.
- 19 Cited and discussed in Gadamer 1996: 167-69.
- 20 Recounted in Ingalls 1974.
- 21 Let us not pretend that any of these ideas are simple. Milner and Browitt 2003 is a convenient overview that shows how risky synopsis is.

REFERENCES

Bloch, R Howard (1990): 'New Philology and Old French', Speculum 65: 38-58.

- Byres, T J and Harbans Mukhia (eds) (1985): Feudalism and Non-European Societies, Frank Cass, London.
- Cerquiglini, Bernard (1999): In Praise of the Variant: A Critical History of Philology, Johns Hopkins University Press, Baltimore (originally Eloge de la variante, 1989).
- Chakrabarty, Dipesh (2000): Provincialising Europe: Postcolonial Thought and Historical Difference, Princeton University Press, Princeton.
- Cohn, Bernard S (1985): 'The Command of Language and the Language of Command' in Ranajit Guha (ed), Subaltern Studies IV: Writings on South Asian History and Society, Oxford University Press, Delhi, 276-329.
- Colas, Gérard (1999): 'The Criticism and Transmission of Texts in Classical India', *Diogenes*, 47, 2: 30-43.
- Emeneau, M B (1950): 'The Epigrams Attributed to Bhartrhari' (review), Journal of the American Oriental Society, 70, 3: 195-97.
- Gadamer, Hans-Georg (1996): Truth and Method, Continuum, New York.
- Hult, David (1991): 'Reading It Right: The Ideology of Text Editing' in Marina S Brownlee et al (eds), *The New Medievalism*, Johns Hopkins University Press, Baltimore.
- Ingalls, Daniel H H (1950): 'The Epigrams Attributed to Bhartrhari by D D Kosambi' (review), *Harvard Journal of Asiatic Studies* 13, 1/2: 253-62.
- (1954): 'A Sanskrit Poetry of Village and Field: Yogesvara and His Fellow Poets', Journal of the American Oriental Society, 74, 3: 119-31.
- (1968): Sanskrit Poetry from Vidyakara's Treasury, Belknap Press, Cambridge, Massachusetts.
- (1974): 'My Friendship with D D Kosambi' in R S Sharma in collaboration with Vivekanand Jha (ed), Indian Society: Historical Probings, In Memory of D D Kosambi, People's Publishing House, New Delhi.
- Jha, D N (ed) (2000): The Feudal Order: State, Society and Ideology in Early Medieval India, Manohar, Dolbi
- Kaviraj, Sudipta (2008): 'Marxism in Translation: Critical Reflections on Indian Radical Thought', Raymond Geuss and Richard Bourke (eds), Political Judgment: Essays in Honour of John Dunn, Cambridge University Press, Cambridge.
- Kosambi, D D (ed) (1948): The Epigrams Attributed to Bhartrhari, with a foreword by Acharya Jina

- Vijaya Muni, Bharatiya Vidya Bhavan, Bombay, Singhi Jain Series 23.
- (ed) (1957): Subhasitatrisati, with the commentary of Ramacandrabudhendra, Nirnaya Sagar Press, Bombay.
- (2002): Combined Methods in Indology and Other Writings, edited by Brajadulal Chattopadhyaya, Oxford University Press, Delhi.
- Kosambi, D D and V V Gokhale (eds) (1957): The Subhasitaratnakosa Compiled by Vidyakara, Cambridge, Harvard University Press, Harvard Oriental Series, Vol 42.
- Marx, Karl (1973): Outline of the Critique of Political Economy (Grundrisse), London, Penguin.
- McGann, Jerome (1991): The Textual Condition, Princeton University Press, Princeton.
- Milner, Andrew and Jeff Browitt (2003): Contemporary Cultural Theory, 3rd edition, Routledge, London.
- Nietzsche, Friedrich (1887): Morgenröte: Gedanken über die moralischen Vorurtheile, second edition, Leipzig, Fritzsch (translated by J M Kennedy, New York, The MacMillan Company, 1913).
- Pollock, Sheldon (2003): 'Sanskrit Literature from the Inside Out' in Sheldon Pollock (ed), Literary Cultures in History: Reconstructions from South Asia, University of California Press, Berkeley/ London.
- (2006): The Language of the Gods in the World of Men: Sanskrit, Culture, and Power in Premodern India, University of California Press, Berkeley.
- (2006a): 'Literary Culture and Manuscript Culture in Precolonial India' in Simon Eliot et al (eds),
 History of the Book and Literary Cultures, British
 Library, London, 77-94.
- Rau, W (1960): 'Subhasitaratnakosa, Compiled by Vidyakara' (review), Orientalistische Literaturzeitung, 55: 77-81.
- Sharma, R S (2001): Early Medieval Indian Society:
 A Study in Feudalisation, Orient Longman,
 Hyderabad.
- Sternbach, Ludwik (1958): 'The Subhasitaratnakosa Compiled by Vidyakara' (review), Journal of the American Oriental Society 78, 4: 316-18.
- Timpanaro, Sebastiano (2006): *Genesis of Lachmann's Method*, University of Chicago Press, Chicago.
- Zetzel, James E G (2002): 'Sebastiano Timpanaro, Virgilianisti antichi e tradizione indiretta' (review), Bryn Mawr Classical Review, 2002.02.09.

59

A Researcher Required for a senior position for the Research Department Indian Social Institute, New Delhi

Indian Social Institute invites applications from qualified and motivated individuals for the post of Researcher in Women's Unit.

Educational Qualification:

- 1 Ph.D. degree in Social Sciences or related field with considerable research, field experience and writing.
- 2 Good knowledge of English and Hindi.

THE INSTITUTE BELIEVES IN INCLUSIVENESS AND THEREFORE SCHEDULED CASTE, SCHEDULED TRIBE, MINORITIES AND WOMEN CANDIDATES ARE ENCOURAGED TO APPLY.

Last date to receive application is 10th August 2008

Kindly apply at the following (by post or by email). Please submit your CV along with the application.

The Executive Director
Indian Social Institute
10 Institutional Area, Lodhi Road, New Delhi 110 003
Email: edoffice@isidelhi.org.in
Website: www.isidelhi.org.in

Economic & Political weekly EPW JULY 26, 2008

The Lily and the Mud: D D Kosambi on Religion

KUNAL CHAKRABARTI

D D Kosambi's investigations into religion in ancient India led him to look at the subject from a point of view that radically departed from the traditional and employ a method of analysis that combined the use of a variety of sources, disciplines, and comparative techniques. A theoretical framework that was new to the study of Indian history supported his reconstruction of the religion of the Indus valley, as well as his explanations for the spectacular rise and fall of Buddhism, and the enduring appeal of the Krishna myths. From today's perspective his work betrays a few blind spots, but it remains largely relevant for the intellectual leap it took in exploring the essential relation between faith and socio-economic factors, and its consciously creative use of Marxism.

here is an interesting paradox in D D Kosambi's treatment of religion. He considered religion to be an epiphenomenon of material life, a set of beliefs and practices that depended on the means and relations of production at a given point in time and space for its precise expression [De 2007: 125-32]. Towards the beginning of the 'Introduction' in his *Myth and Reality: Studies in the Formation of Indian Culture*, a collection of essays on religion, he wrote, "One of the main problems for consideration is: Why is a fusion of cults sometimes possible and why do cults stubbornly refuse to merge on other occasions? Naturally, this question cannot be answered on the 'highest plane', for it simply does not exist on that level" [1962: 2].

At what level does it exist, then? When Kosambi formally addressed the question of religion in the context of the earliest class-based society in India - the Indus valley civilisation - he asked, "The main question is, how was class structure maintained?". His characteristically unambiguous answer was that, in the final analysis, class division rested on the use of force by which the surplus produced by the working class was expropriated by the ruling minority. However, the need for violence was reduced to a minimum by using religion to convince the working class that it must give up the surplus, "lest supernatural forces destroy them by mysterious agencies" [1975a: 62].1 Therefore, religion for Kosambi was a supplementary instrument for extracting the surplus by threatening divine retribution. This conception of the role of religion in human history keeps coming back in almost identical terms throughout his corpus. For example, in an article published in 1954, even before his first book was published, he wrote, "Caste is class at a primitive level of production, a religious method of forming social consciousness in such a manner that the primary producer is deprived of his surplus with the minimum coercion" [emphasis in the original, 2002: 59]. Similarly, religion was a "tool of the state – which meant the ruling classes" - and "the brahmin was an essential adjunct of the state in reducing the mechanism of violence" [1975a: 292, 313].2

Kosambi had a low opinion of religion. He believed that popular religion comprised "superstition" and "ritual malpractices", and stated that "Indian tradition combines religion with love (or sex with superstition)" [1962: 1, 7]. Yet, he was primarily concerned with the popular aspects of religion rather than the ideal and the philosophical. Writing in the early 1960s, he knew that this approach required an explanation. He therefore proceeded to pose a question and then answer it in his usual dialogic manner. "Why should anyone ignore the beautiful lily of Indian philosophy in order to concentrate upon the dismal swamp of popular superstition? That is precisely the point. Anyone with aesthetic sense can enjoy the beauty of the lily; it takes a considerable

Kunal Chakrabarti (shubhrachakrabarti@yahoo.com) is with the Centre for Historical Studies, Jawaharlal Nehru University, New Delhi.

scientific effort to discover the physiological process whereby the lily grew out of the mud and filth" [1962: 1]. "The beauty of the lily" was a concession, for he considered much of Indian philosophy to be pointless hair-splitting.

If so, why deal with religion at all? This question would have surprised Kosambi, for religion occupied a central place in his analytical scheme. He stood out among his fellow historians because of a theoretical framework that "For all that...remain(ed) Marxist" [1975a:12] remained Marxist, a method of analysis that combined the use of a variety of sources, disciplines, and comparative techniques, and a vision that attempted to "comprehend the totality of Indian history" [Thapar 1993: 100]. His project was to identify and analyse the dynamics of the socio-economic and political processes that contributed to successive stages in the evolution of Indian society from the earliest times to the present. In an article in 1955, Kosambi declared, "The major historical change in ancient India was not between dynasties but in the advance of village settlements over tribal lands, metamorphosing tribesmen into peasant cultivators, or guild craftsmen" [2002: 312]. State-sponsored religion contributed to this process by assimilating divergent local cults through comparatively peaceful means. He wrote, "The complicated brahmin pantheon conceals beneath its endless superstition the effort to assimilate and to civilise the most primitive and gruesome cults, without destroying them, just as the people were assimilated without violent conflict" [1975: 45].

Kosambi subsequently showed that this chain of transformation of tribes into peasants, into castes, was the major trajectory of social change in India, which was not confined to the ancient period alone.3 The main advances in Indian history, as he envisaged them, were from the urban Indus valley civilisation to Aryanisation, then clearing and settlement of the forested Gangetic plain, followed by a "primitive" feudalism, "pure" feudalism, and modern capitalism, points out B D Chattopadhyaya (2002: xxvii). These changes occurred through transformations in the modes of production, and religion, which played a vital role in maintaining a class-based social structure and the expansion of state society, was implicated in this process in a fundamental way. This is what one means when saying Kosambi's treatment of religion is paradoxical. Other historians may have far greater respect for religion as a personal faith and allow it an autonomy of agency in social processes that Kosambi would have denied, and they may yet end up placing it on the margins, while for Kosambi, religion was no less a factor than any other that contributed to the complex processes of social change. He preferred the "scientific effort" of investigating the mud than contemplating the lily, for he believed that it was the responsibility of the historian to unravel what lay hidden beneath and locate it on the larger canvas of human experience as a whole. His project was ambitious, but he was equipped to pursue it, and his works have changed our understanding of Indian history in a fundamental and unprecedented way. All major historians, who have written on Kosambi, acknowledge the paradigm shift brought about by him in the study of Indian history.

One of Kosambi's major preoccupations was studying tribal religions through meticulous fieldwork and tracing the patterns of

their interaction with institutional religions. His observations on the subject are scattered throughout his work. In this essay, we will look into some recurrent themes that he dealt with in detail – his reconstruction of the religion of the Indus valley civilisation and his understanding of its interface with the Vedic civilisation; the rise and fall of Buddhism; and the Krishna cycle of myths. This will allow us to identify both the strengths and weaknesses of his approach towards religion.

Indra and Vritra

Kosambi argued that in the prosperous Indus valley civilisation, "the tools of violence were curiously weak" [1975a: 63]. The weapons were flimsy and nothing like a sword had been discovered. In the absence of a strong army or police, the unequal sharing of surplus was maintained by deploying religion. He believed that the citadel at Mohenjodaro was a religious complex corresponding to "the temple-zikkurat structures in Mesopotamia" [1975a: 63]. The adjacent Great Bath was a ritual tank, which was a prototype of the sacred lotus pond,4 and it was dedicated to the worship of a mother goddess. He speculated that consorting with the temple slaves at the sacred pool had been part of a fertility ritual. Besides, the Indus valley seals depict cult figures of male animals and a few human figures. Summing up the state of Indus valley religion, Kosambi said, "The picture here is of a fixed class of traders under the tutelage of a mother-goddess temple" [1975a: 66]. The monopoly of the traders was secure and its continuation was ensured by a static tradition. He believed that this explained why the Indus script - and the culture as a whole - did not change over 500 years or more.

This static tradition was broken by the Aryan invasion.⁵ The Rigveda describes the chief Aryan war-god Indra, "a model of the marauding bronze-age chieftain" [1975a: 72], who busily looted the stored treasures of the godless. Kosambi believed that this referred to the Indus valley settlers who were defeated in battle by the invading Aryans. "At Harappa, the top layer of occupation is distinctly foreign", he observed [1975a: 72]. The Aryans also destroyed the agricultural system of the Harappans, the basis of their food production, which explains why the cities disappeared soon after their arrival. The pre-Aryan method of agriculture, Kosambi argued, depended on natural floods and on damming small rivers to flood their banks so that a fertile deposit of silt was obtained to be raked with harrows. He categorically stated, "The Indus people did not have the plough...but only a toothed harro..." [1975a: 68]. This flood and harrow agriculture was disrupted by Indra, who is repeatedly described in the Rigveda as freeing the rivers from the grip of a demon called Vritra. Kosambi cited philological evidence to suggest that the term vritra meant an "obstacle" or "barrage", which fitted in with the description of the encounter between Indra and Vritra. The Rigveda says that the demon lay like a dark snake across the slopes, obstructing the flow of the rivers. When the demon was struck by Indra's thunderbolt, the ground buckled, the stones rolled away like chariot wheels, and the pent-up waters flowed over the demon's recumbent body. Kosambi pointed out this was a good description of the breaking up of dams. Indra is also praised for restoring the Vibali river (unidentified), which had flooded land along its

banks, to its natural course. Kosambi argued that flood irrigation was the Indus practice. This would have made the land too swampy for the Aryan cattle herds, while the blocked rivers made grazing over long reaches impossible. With the disappearance of dams and the rivers restored to their natural courses, an enduring occupation of the Indus cities became possible [1975b: 80].

Kosambi not only believed in the Aryan conquest and occupation of the Indus valley cities, but also suggested that the first brahmanas were a result of the "interaction between Aryan priesthood, and the ritually superior priesthood of the Indus culture" [1975a: 102]. He found evidence for "non-Aryan brahmins" in that some of them, unlike the Vedic peoples, were called the sons of their mothers. He argued that in the light of this, the legend of the blinded Dirghatamas, the son of a dasi - floating east down the river "to find honour among strange people, as Indus priests might have tried to do", became meaningful [1975a: 102]. In an essay written as early as 1946, Kosambi pointed out that the "passage-over" of sections of the conquered as priests to the conquerors led to "the unhappy existence of a cultured priestclass" and many discrepancies between the Vedic and the epic records [2002: 200]. He wrote later that the brahmanas were initially not proficient in performing the fire sacrifice. Many passages in the Upanishads suggest that the brahmanas of the Ganga valley had to learn the ritual from the kshatriyas or had to go to the north-west, where, presumably, the tradition was still alive. "This shows that the older brahmin tradition in the Gangetic basin could not have been of the Aryan sacrifice, but was something else; perhaps secret lore from the Indus valley or from tribal medicine-men, or both" [1975a: 132].

It seems that Kosambi was a little uncertain about the origin of the brahmanas, but he firmly and consistently held that they originally belonged to non-Aryan cultures and were very probably drawn from the Indus valley priests. He wrote elsewhere that the god who was above everything was originally Indra.6 This position arose from the historical fallout of the Aryan conquest and brahmanical assimilation of him, "for a destructive chieftain had to be worshipped as a god by those priests whose very civilisation he had destroyed" [2002: 383]. Kosambi then worked his way through a dense textual tradition to demonstrate how the character of Vritra changed over a period of time in Sanskrit mythology. For instance, in the vulgate Shanti-parvan of the Mahabharata, Vritra appears as a very noble king, who is magnificent even in defeat. He is taught by no less than Ushanas, a Bhargava brahmana. The Bhargava redactors of the Mahabharata possessed "hostile myths...which they wrote into the Aryan sacred documents". Indra, known for his harshness to the brahmanas, was not considered suitable as an object of faith and had to yield place to Vishnu-Narayana-Krishna in later mythology. The transformation of Indra showed that the killing of Vritra rankled, at least in the minds of one important group of brahmana clans.

"Indra's most difficult achievements appear later as transgressions against Brahmins. This submerged portion of the tradition must have had some historical foundation, and therefore been retained, painful and humiliating though it was, in Brahmanical memory throughout the early period of Kshatriya dominance" [2002: 387-88].

This reading of a strand in the evolution of the brahmanical tradition explains Kosambi's characterisation of the cultured priestly class as unhappy. He even referred to the existence of "a Brahmanical...pre-Vedic golden age" [2002: 386].

Faulty but Impressive

We can see now that there are many problems with these formulations. For instance, it has been suggested that Kosambi's assumption of the centrality of religion in Indus civilisation is farfetched. Sufficient evidence does not exist either to suggest that the Indus state had only a weak command over force, or to definitely identify specific structures as temples or sites of ritual.⁷ It has also been pointed out that the assertion that the Indus people did not know the use of the plough and that the Aryans introduced it to India is untenable. Recent evidence suggests that plough agriculture was practised by non-Aryans in the pre-Harappan period. Indeed, the more commonly used term for the plough in Vedic literature is of non-Aryan etymology. Further, Kosambi's dependence on philology in linguistic analyses, for example, in detecting non-Aryan elements in brahmana 'gotra' names, is considered outmoded even for his time [Thapar 1993: 101-102, 94-95].8 Also, historians now prefer the theory of Aryan migration to Aryan invasion and are much more circumspect about the Indus Vedic continuum than the manner in which Kosambi envisaged it.

At the same time, the qualities that distinguish Kosambi as a historian, such as his holistic and original vision, the range and breadth of his scholarship, his analytical rigour, and his courage to break away from the traditional mould and offer alternative readings of sources, are evident in his treatment of these contentious issues. His imaginative interpretation of the Indra-Vritra myth was radically new and not implausible in the light of the Rigveda's description of the encounter, even if his theory that agriculture in the Indus valley was dependent on natural and artificial flood irrigation was a little speculative. Besides, Kosambi's poser about how the agrarian base of the Indus valley culture declined has not yet been satisfactorily answered. New evidence has established the pre-Aryan existence of the plough, but Kosambi's reconstruction of the agrarian technology of the Harappans was not wild conjecture. He had painstakingly built his case on the basis of evidence obtained from Mesopotamia and Egypt, archaeological artefacts such as Indus valley seals, and the oldest known description of the Indus valley climate and agriculture by Greek geographer Strabo. Most importantly, he demonstrated how to look for information on material life in sources as remotely connected to it as myths describing the exploits of divinities, and how the expression of religious ideas could potentially be conditioned by historical events. New research will always overtake older conclusions, but it is difficult not to appreciate Kosambi's method and insights.

However, the most provocative and problematic of all issues discussed here is Kosambi's contention that the brahmanas were initially non-Aryans. An amazing display of textual scholarship, not even a fraction of which can be reproduced here to illustrate the point, accompanies this conclusion, however baffling it may appear to us today. But, in the process, he drew attention to a now accepted proposition that the Vedic texts are not written in

pure Aryan and that non-Aryan structures and forms are evident both in their syntax and vocabulary [Thapar 1993: 94]. This proves interactive proximity between Aryan and non-Aryan social groups, but does not necessarily suggest a crossover or co-option of the Indus priests into the Vedic religious apparatus. It should be noted that Kosambi arrived at this conclusion rather early in his career as a historian and stuck firmly to it until the end. This indeed is by and large true of almost all his conclusions, which show his courage of conviction on the one hand, and an unwavering, if stubborn, commitment to his ideology, method, and judgment on the other.

The Shakya Prince

Kosambi was comparatively soft on what is often called heterodox religions, especially Buddhism. He never categorically stated this, but the fact that Buddhism, Jainism, Ajivikism and some other minor religions with comparable features came in the wake of a felt need for a more productive social organisation, and contributed substantially to a series of major socio-economic and political changes, seems to have met with his approval. "The 1,500 years of the full cycle of the rise, spread, and decline of Buddhism saw India change over from semi-pastoral tribal life to the first absolute monarchies and then to feudalism," he wrote [1975b: 97]. A usually taciturn Kosambi (except when he disapproved of the conduct of a god, a Buddhist monk, or a brahmana) waxed eloquent about the achievements of Buddhist Asia, seemed to admire the Buddha's renunciation of "the life of a Sakayan oligarch", considered the Buddha's approach to the human condition as "a scientific advance" [1975a: 162-63, 165], and described him as the "unquestionably great founder" of a forward-looking religion [1975b: 100]. He wrote, on a rare personal note, that the blood sacrifices offered to goddess Lumbini at Rummindei (the birthplace of the Buddha) "disgusted pious Buddhists, my father among them" [1962: 101]. This might have been his own feeling as well.

Kosambi argued that the simultaneous rise of so many "religious sects" of considerable appeal and prominence in one narrow region (the eastern Ganga valley) implied some social need that the older doctrines could not satisfy. All the new religions denied the validity of Vedic rituals. The greatest fruit of the sacrificial ritual was success in war. Fighting was glorified as the natural mode of life for the kshatriyas, and the performance of Vedic sacrifices was the duty and means of livelihood of the brahmanas. The vaishyas and the shudras had the task of producing the surplus, which the priests and the warriors took away by natural right. Kosambi added that the sacrificial ritual was formulated at a time when the Vedic tribes were primarily pastoralists and collectively owned large herds of cattle were the main form of property. When agriculture replaced pastoralism as the mainstay of the economy, the slaughter of a large number of animals at a growing number of sacrifices meant a much heavier drain on producer and production. The number of cattle bred per head of population decreased and they were now privately owned by clans or families rather than tribes. Besides, cattle became more valuable to peasants than to herdsmen. But cattle continued to be taken for sacrifice without compensation, as before, which meant a heavy tax on the vaishya producers. Apart from this waste of resource, trade and production were disturbed by unceasing petty warfare. Both Buddhism and Jainism based themselves on ahimsa, or non-violence, which opposed both ritual sacrifice and war.

The emphasis on not stealing or encroaching on the possessions of others in the new religions shows that a totally new concept of private, individual property had come about. The injunction against adultery denoted a rigid conception of family. Kosambi pointed out that without such a morality, trade would have been impossible. The most devoted of the Buddha's lay followers were traders. These basic changes in the forms of property and means of production necessitated a corresponding change in the religious sphere. "New gods had to be invented thereafter, because Indra and his Vedic fellow deities...went out of fashion with their Vedic sacrifices" [1975a: 167]. Kosambi argued that the new ideology was also against tribal exclusiveness. For instance, these religions declared that all living creatures would be reborn on the basis of their good or evil karma (actions) - not into a special totem, but into any species determined by their karma, which could range from the smallest insect to a god. "Karma therefore was a religious extension of an elementary concept of abstract value, independent of the individual, caste, or tribe", he wrote [1975a, 167-68]. Since karma would grow and ripen like a seed planted in the previous season, or mature like a debt, the concept had a wide appeal to peasants and traders, and even to shudras who could aspire to be reborn kings.

Finally, the new religions, in the beginning, were much less costly to support than Vedic brahmanism. The Buddhist monks and ascetics took no part in production. But, at the same time, they did not exercise any control over the means of production. They were forbidden to own property and were supposed to live on alms. They thus broke the commensal taboos of both tribe and caste. The monks not only renounced family, but also caste and tribal affiliations at the time of their initiation. They went along new trade routes, even into tribal wilderness, preaching to people in their own language. They lived closer to the people than the priestly brahmanas. However, none of the new religions rejected the notion of caste (which, for them, was more a sign of social distinction than a mark of an innate and inflexible social hierarchy, as in brahmanism), or fought to abolish the caste system. But the Buddha is credited with saying that the status of the Arya and the Dasa (the earliest scheme of social classification in the Rigveda) was interchangeable, thus rejecting the brahmanical assumption that the caste system was part of the natural order. Kosambi pointed out the Buddhist precepts were meant for a class-based society, which went far beyond the lines drawn by tribe, caste, or cult. "It must be kept in mind that we are in the presence of the first society divided into classes, linked indissolubly to a new form of production..." [emphasis in the original, 1975a: 170-71]. He argued that the punch-marked coins were an indication of developed commodity production.

Among these new classes were the free peasants and farmers for whom the tribe had ceased to exist. Some traders became so wealthy that the 'shreshthi' (financier or head of a trade guild) became the most important person in many of the emerging urban centres. The term 'gahapati' ('grihapati' in Sanskrit), which

referred to the principal sacrificer in Vedic literature, now came to signify the head of a large patriarchal household of any caste who commanded respect primarily for his wealth, irrespective of whether it was gained by trade, manufacture, or farming. "The gahapati, as the executive member of the new propertied class... was no longer bound by tribal regulations", as Kosambi put it [1975b: 101]. The new religions were attempting to reach out across castes and tribes "to a wider social range through their universal ethic" [Thapar 1993: 104]. The Buddhist scriptures addressed the whole of contemporary society and not a particular community or a few learned adepts. Thus, with the dissolution of tribal bonds, a new class-based society was emerging, which required a different socio-political order to regulate it. The incentive for the farmer to produce surplus came from trade in that surplus. The trader had to travel long distances and needed safe trade routes. It needed a political authority that would rise above smaller communities and establish what Kosambi called a "'universal monarchy', the absolute despotism of one as against the endlessly varied tyranny of the many" [1975a: 169]. Later traditions record that the Buddha suggested that it would be the duty of this universal monarch to address the problems of poverty and unemployment, which could not be solved by either charity or force. He should supply seed and food to those who lived by agriculture and cattle breeding, and necessary capital to those who lived by trade. The best way of spending the accumulated surplus of the treasury would be to invest it in public works such as digging wells and planting groves along trade routes. Kosambi described this as "a startlingly modern view of political economy" and "an intellectual achievement of the highest order" [1975b: 113].

Ashoka and After

This political philosophy of the new religions penetrated the state mechanism with the Muaryan emperor Ashoka (273-232 BCE). After his conversion to Buddhism, following a traumatic war, he declared that in all his actions he would strive to discharge his debt to all living creatures. This was completely strange to earlier Magadhan statecraft, and the concept of kingship in the Arthashastra (the paradigmatic text on polity in early India), which held the king owed nothing to anyone. Historians, including Kosambi, have suggested that though Ashoka was a Buddhist by personal faith and promoted Buddhism within his empire and abroad, the moral code he adopted as the guiding principle of state was influenced by, but not synonymous with, Buddhism. His pillar and rock edicts, containing his message to his subjects, were placed at important crossroads on major trade routes or near the new centres of administration. The edicts show a basic change in policy on the part of the state. For instance, Ashoka established hospitals and laid out groves, fruit orchards, resting places, and wells along all the major trade routes. He instituted the office of Dharma-mahamatra (translated by Kosambi as High Commissioner of Equity), whose duty was to ensure that all lawabiding groups and sects were treated fairly. These were welfare measures that brought no material return to the state, but conformed to the idea of the ideal ruler mentioned in Buddhist discourses. Ritual sacrifice was forbidden by decree and burning down forests for hunting animals or clearing land was prohibited. Kosambi argued that the Vedic Aryan way of life passed the point of no return. Society had made the final transition to agrarian food production, "so that the rougher customs of the pastoral age would no longer suit" [1975b: 162]. More importantly for him, "The new attitude towards subjects and new works on the trade routes established a firm class basis for the state...The state developed a new function after Ashoka, the reconciliation of classes" [1975b: 165]. He felt that the special tool for this conciliatory action was the universal dhamma (dharma in Sanskrit), which brought the king and the citizen to the common ground of a newly developed religion.

Buddhism continued to flourish, both in the north and the south. A Buddhist council was held during the reign of the Kushana emperor Kanishka (late 1 ce), where a split between two schools of Buddhist thoughts occurred. The northerners claimed the Great Vehicle (Mahayana), corresponding to the activities and tastes of the nobles and satraps who continued to make large donations to Buddhist monastic foundations. The Mahayana school changed its language to Sanskrit, and drifted away from the common people with its refined doctrines and abstract philosophy. The conservative Lesser Vehicle (Hinayana) retained a "primitive austere Buddhism", with its simpler Pali language, which, however, was as incomprehensible to the common people of the south as Sanskrit was to those of the north. Kosambi wrote, "The basic productive difference upon which the rest was embroidery may roughly be put as follows. The Mahayana abbeys took direct part in exploitation of their considerable accumulation in land, metals, and other means of production. The Hinayanist were, on the whole, less efficient in such exploitation..." [1975a: 261-62].

The Kushana rulers ushered in a new era of magnificent donations to the Buddhist monasteries. In western India and the Deccan, gifts poured in from kings and governors, merchants and bankers, merchants' unions and guilds of artisans, individual scribes and craftsmen, and even fishermen and peasants. Donations from artisans, workers and peasants suggest that "society then must have been of commodity producers, on a scale not familiar to later days in the Deccan, or indeed anywhere else in the country" [1975b: 184]. Interestingly, some gifts to the monasteries were made by Buddhist monks and nuns. The monasteries became very wealthy from donations and from their involvement in long-distance trade. The Buddhist missionaries who went to China were associated with overland merchants. The Deccan cave monasteries were located on frequently used trade routes. The monasteries were important customers for the caravans, and were resting places, supply houses, and banking houses for the caravaneers. Kosambi pointed out that the monasteries performed an important task of the universal monarch; the monastic wealth often provided some of the capital so badly needed by early merchants in the Indian hinterland. "The church and state had come to terms. The Buddha had correspondingly turned into a regular counterpart in religion of the emperor...in civil life" [1975b: 178]. Kosambi wrote that this special economic function of Buddhism was "the main reason why Buddhism could grow for so many centuries after the ancient pastoral yajna [sacrificial ritual] against which it protested so effectively had vanished under pressure of widely developed agrarian food production" [1975b: 182], that is, long after Buddhism had performed its original economic function, which had accounted for its initial success.

But wealth corrupts. The accounts of Chinese travellers reveal how the monks gave up austerities and adopted an extravagant lifestyle. Buddhist art, such as the frescoes at Ajanta, portraying bejewelled Bodhisattvas towering above ordinary human beings, demonstrate the extent to which the religion departed from the spirit and precepts of its founder. Some other developments also fundamentally altered the original character of Buddhism. Mahayana Buddhism admitted a whole new pantheon of gods and goddesses, and the number of past Buddhas multiplied beyond limit. "The most primitive fertility rites reappeared, sublimated in form, as Tantrism" [1975b: 178] and penetrated Buddhism, Jainism, and other contemporary religions. The Buddhist principle of non-violence was adopted by Ashoka as state policy. Yet, "[T]he devout Buddhist emperor" Harsha of Kanauj (605-655 CE) "fought incessantly for at least thirty years" to enlarge his empire. The "system and the monasteries it supported passed away when Buddhism had become a drain upon the economy instead of a stimulus," wrote Kosambi [1975b: 185]. The monasteries locked up a vast amount of precious metals, which were badly needed for currency and tools. The long-distance luxury trade, especially with the Roman empire that collapsed in 3 CE, was surpassed in volume by predominantly regional barters in essentials, under a wholly different set of merchants. The long caravans gradually dwindled and the powerful guilds of artisans and merchants broke up. "Production increased, but commodity production per head and the incidence of exchange over long distances both declined" [1975b: 186]. From about 6 CE, the passes were guarded by forts, "a new feature of the feudal landscape," which began to collect tolls from caravans. With the decline in the economic base of Buddhism, the large monasteries had to go, but the ancient goddesses, whose primordial cults had been situated near the monasteries and were displaced by Buddhism, sometimes returned to their old haunts.9 In this context, Kosambi remarked, in a slightly disjointed manner, "In India the necessary economic measures often appeared with theological trappings, as a change in religion" [1975b: 186]. In the paragraph, this sentence reads like an interpolation, but it encapsulates his basic assumption and analytical approach towards the history of religion.

Kosambi's treatment of Buddhism is a good example. It is not as if he did not briefly recount the Buddha's biography or discuss his basic teachings, but his understanding of the phenomenon of the rise of a set of religions in a particular time and space was predicated upon the thesis that this religious movement was in the vanguard of a transition in the nature, technology, and organisation of food production, as well as a facilitator and a legitimiser of it. It marked a transition from the sacrifice-oriented pastoral system of communal production to a non-killing agrarian system of private production. Artisanal production and long-distance trade were woven into this argument, and the persistence of a religion such as Buddhism, even after its original economic function was fulfilled, was explained in terms of the

involvement of monasteries with trade in various capacities. In fact, it is possible to detect an element of determinism in this teleological vision of the "functions" of a religion, though it undoubtedly performed important and necessary functions, economic or otherwise. Still, when he writes, "This trade died out... The monasteries, having fulfilled their economic as well as religious function, disappeared too" [1962: 100], it reads a little mechanical. However, it should be remembered that the correlations he worked out were by no means forced or simplistic. They were marked by the same intuitive insight, logical rigour, and textual density that characterised his analysis of the Indus and Vedic religions. Indeed, his presentation of the origin, evolution, and decline of Buddhism was more closely worked out than the preceding case. Romila Thapar has criticised Kosambi for not considering the monastic institution as the foci of political and economic control, a role it often played [1993: 110]. It is true that he did not adequately emphasise the political aspects of monastic wealth and influence, but he did not ignore it altogether. He repeatedly drew attention to the close linkage between the monastery and the state, to the extent of claiming that the monasteries took over certain economic functions of the state, such as financing merchants. Rather, he tended to generalise, without acknowledging that it is difficult to compute how substantial this financial support was in quantitative terms. The history of Buddhism in early India has remained a neglected field of study for the last half century. The few important works that exist are mostly social histories based on data drawn from the Buddhist textual corpus or studies of socio-political phenomena influenced by Buddhist ideas, rather than religious history proper. 10 Nearly all these have been deeply influenced by Kosambi's works.

Brahmana Revival

A parallel process was under way alongside the growth of the heterodox religions. The pastoral life of the Punjab tribes with their ritual sacrifices was wrecked beyond any possibility of revival, first by Alexander's invasion (330-327 BCE) and then by the Magadhan conquest of this area in the following decade. Ashokan reforms completed the mutation of the older Aryan tribal priesthood, the brahmanas. "An important class was thus freed for the first time from tribal bonds and traditional Vedic ritual duties," wrote Kosambi [1975b: 166]. The brahmanas were the one social group in ancient India with obligatory formal education and an intellectual tradition. The respect shown by Ashoka and his successors to the leading brahmanas of the day was due to the important role that they had already begun to play in maintaining a class structure in society, which involved the unification and absorption of originally irreconcilable social groups, and aiding the spread of an agrarian society.

The brahmanas continued to perform rituals, though not exclusively Vedic. In this, their rivals were tribal priests, "the primitive medicine-men," who began to be absorbed "with their superstitious lore" within brahmanism. Sometimes, the brahmanas took over and supplemented the priestly tasks for a guild caste or a tribe caste with their own rituals, "always excluding or softening the worst features of the primitive rites" [1975b: 168].

The heterodox religions had abandoned all rituals. So, only the brahmanas could officiate at the sacraments of birth, death, marriage, and other life cycle rituals, bless the crops at sowing time, propitiate evil stars, and placate angry gods. These new rituals were profitable if they served the householder class ('grihapati/gahapati') of agrarian and trading society. The brahmanas offered their services to all, regardless of caste, for a fee and on condition of respect for brahmanical institutions.

"This process of mutual acculturation accompanied the introduction of a class structure where none had existed before," Kosambi pointed out [1975b: 171]. The brahmanical 'smritis' (law books) emphatically stated that kingship was essential for the preservation of the social order. Many kings of tribal origin had the brahmanical "Golden Womb" ceremony performed by which they were symbolically born into a new caste, usually kshatriya. The later kings, of whom some were Buddhists, insisted that that it was their duty to uphold the four-caste class system. All this amounted to keeping down a newly created set of vaishyas and shudras by brahmana precepts and kshatriya arms. The chief, supported by a few nobles freed from tribal laws, became the ruler of his former tribe while the ordinary tribesmen merged into a new peasantry. Kosambi very perceptively observed,

"Disruption of the tribal people and their merger into general agrarian society would not have been possible merely by winning over the chief and a few leading members. The way people satisfied their daily needs had also to be changed for the caste class structure to work. The tribe as a whole turned into a new peasant 'jati' caste-group, generally ranked as shudras, with as many as possible of the previous institutions (including endogamy) brought over" [1975b: 172].

The brahmanas acted as pioneers in undeveloped localities. They often brought with them plough agriculture to replace slash and burn cultivation or food gathering, new crops, knowledge of distant markets, organisation of village settlements, and trade. As a result, kings invited brahmanas, generally from the distant Ganga valley, to settle in unopened localities. From the fourth century ce onwards, almost all extant copper plate inscriptions in India record land grants to brahmanas unconnected with any temple. "This procedure enabled Indian society to be formed out of many diverse and even discordant elements, with the minimum use of violence. But the very manner in which the development took place inhibited growth of commodity production and hence of culture, beyond a certain level" Kosambi wrote [1975b: 172-73]. The inclusivist approach of the brahmanas led to an incredible proliferation of rituals. Similarly, tribes, castes, clans, guilds, and even civic bodies were allowed to retain their laws, which were never recorded. Thus, the basis for a broad, general common law on the principle of equality was lost. The development of an idealist philosophy by Shankara (9 CE) and others led to a disregard for mundane reality, which inhibited the growth of science. Kosambi said,

"The advance of culture needs exchange of ideas, growing intercourse, both of which depended in the final analysis upon the intensity of exchange of things: commodity production. Indian production increased with population, but it was not commodity production. The village mostly managed to subsist on its

own produce...This curious isolation of village society accounts for the fantastic proliferation of the medieval Indian system of religion and religious philosophy..." [1975b: 175].

He described the post-Gupta phase (6 cE) in early Indian history as "the triumph of the village".

This process of brahmanisation and its consequences, both positive and negative, have been extensively discussed by Kosambi in two monographs and several essays, particularly "The Basis of Ancient Indian History" in two instalments. He brought in issues, such as the role of Sanskrit in uniting the new upper classes, which meant a reallocation of the surplus and legitimisation of new cults, 12 ideas that were novel in his time and have been introduced into discussions on the socio-cultural formations of early India only in recent years. However, after this brief summary of Kosambi's outstanding and highly nuanced analysis of one of the most fundamental civilisational processes in India, we turn to the more overtly religious aspect of the same assimilative practice – the making of a new pantheon.

The Dark Hero

Kosambi pointed out that in the process of inducting the tribes into a caste society, the exclusive nature of tribal rituals and tribal cults was modified, tribal deities were equated with standard brahmanical gods, or new brahmanical scriptures were written to make inassimilable gods respectable. With the new deities or identities came new rituals, special dates for particular observances, and new places of pilgrimage - their antecedents and rationale explained in suitable myths in the Ramayana, the Mahabharata, and, in particular, the Puranas. The mechanism of assimilation followed a pattern. Some totemic deities, including the primeval Fish, Tortoise and Boar were made into incarnations of Vishnu-Narayana. The monkey-faced Hanuman, hugely popular with cultivators, became the faithful companion servant of Rama, another incarnation of Vishnu. The great earth-bearing Cobra became the canopied bed of Vishnu-Narayana, and the same Cobra became Shiva's garland and Ganesha's weapon. The bull, which was worshipped in south India as an independent cult object, became Shiva's mount. "The worship of these newly absorbed primitive deities was part of ... a clear give-and-take. First, the former worshippers, say of the Cobra, could adore him while bowing to Shiva, but the followers of Shiva simultaneously paid respect to the Cobra in their own ritual services..." [1975b: 170]. "Matriarchal elements" were won over by identifying the mother goddesses with the wives of male gods, such as Shiva's Durga-Parvati and Vishnu's Lakshmi. The complex divine household carried on the process of syncretism. The marriages of gods implied human marriage as a recognised institution and would have been impossible without the social fusion of their formerly separate, and even inimical, devotees. The integration of the new jati castes was guaranteed by the respect their gods now received from society as a whole, while they became an integral part of that society by worshipping other gods along with their own transformed deities.

Of these new gods and goddesses, Kosambi's favourite was Krishna, judging by the number of pages he devoted to the exposition of this deity. Summing up the character and achievements of Krishna, as represented in brahmanical mythology, he wrote, "The many-faced god is...inconsistent, though all things to all men and everything to most women: divine and lovable infant, mischievous shepherd boy; lover of all the milkmaids in the herders' camp, husband of innumerable goddesses, most promiscuously virile of bed-mates; yet devoted to Radha alone in mystic union, and an exponent of ascetic renunciation withal; the ultimate manifestation of eternal peace, but the roughest of bullies in killing his own uncle Kamsa, in beheading a guest of honour like Shishupala at someone else's fire sacrifice; the very fountainhead of all morality, whose advice at crucial moments of the great battle (in which he played simultaneously the parts of dues ex machine and a menial charioteer) nevertheless ran counter to every rule of decency, fair play, or chivalry. The whole Krishna saga is a magnificent example of what a true believer can manage to swallow..." [1975b: 114].14

Still, according to Kosambi, Krishna's popularity had to be explained in terms of his having performed a complex set of important socio-economic functions.

He observed that this versatile god had a humble beginning. The only archaeological data about Krishna comes from his traditional weapon, the discus. This was not Vedic and went out of fashion long before the Buddha. But a cave drawing in Mirzapur district of Uttar Pradesh shows a charioteer attacking the aborigines - who drew the picture - with such a discus. Kosambi put the date at about 800 BCE, roughly the time Banaras was first settled. The charioteers were Aryans exploring the region across the river for iron ore. On the other hand, Krishna in the Rigveda was a demon; his name was the generic designation of hostile darkskinned pre-Aryans. Kosambi suggested that the basis of the Krishna legend was a hero and later demi-god of the Yadu tribe, one of the five main Aryan people in the oldest Veda. But the Yadus were alternately cursed or blessed by hymn singers according to the current alignment in the constant fighting between the Punjab tribes. Krishna was also a Satvata, an Andhaka-Vrishni, and was fostered in a 'gokula' (cattle-herders' commune) to save him from his maternal uncle Kamsa. The transfer related him to the Abhiras, a historical and pastoral people early in the Common Era, the progenitors of the modern Ahir caste. Later, Krishna's marriages were a vital step forward in assimilating "patriarchal Aryans to some matriarchal pre-Aryans", Kosambi pointed out.

"It must always be remembered that not only would food-gatherers rise to food production, but Aryans could also degenerate into food-gatherers because of the environment; at both stages, fusion between the two sets of people was possible and facilitated by mutual adoption of cults. The divine marriage reflected human unions. The resultant social combination was more productive, with a better mastery of the environment" (1975b: 117).

Among the various heroic feats of adolescent Krishna, such as the taming of the poisonous many-headed Naga, Kaliya, one early exploit accelerated his rise to fame – protecting the cattle of the gokula from the Vedic god Indra. The gokula shifted from the river bank opposite Mathura to higher ground at Mount Govardhana for the rainy season. This annual pastoral movement was marked by sacrifices to Indra. Krishna changed the custom,

substituting it with worship of the mountain and the cows. An enraged Indra showered missiles on the renegade cowherds, but Krishna easily lifted the mountain with one finger, sheltering the cows and their masters. Kosambi argued that the conflict clearly signalled a change from Vedic pastoral sacrifices to cults more suited to agriculture.

He also suggested that the fight was a three-cornered one, for Indra saved most of the Nagas (Kosambi understood this term as referring to "savage tribes" with a 'naga' (cobra) totem, "combined under a generic name by the Aryans", 1975a: 128-30) whom Krishna and the Pandavas, the protagonists of the Mahabharata, crushed whenever possible. Krishna was a "late intruder" into the epic. He joined the Pandavas in burning down the Khandava forest to clear the land. It was only after the sage Markandeya informed the Pandavas that their companion Krishna was actually a god that they recognised his divinity. Kosambi speculated that the ambiguous position of the Yadus in the Rigveda and Krishna's dark skin might have been one step in the recombination of the Aryans with the aborigines, just as the irreconcilable Naga stories were a clear step in that direction. The Mahabharata begins with an account of how the Nagas were saved from Janamejaya's sacrificial fire by the brilliance of a priest called Astika. This young brahmana was the son of a Naga mother. Janamejaya's chief priest similarly had a brahmana father and a "snake" mother. These indicate that the assimilation of the Naga food-gatherers into the caste-based peasant society had already begun. The process was completed by Krishna's older brother and associate Balarama, who was made into an incarnation of the primeval naga. Balarama is also called Samkarshana, the ploughman, who carries a plough as his insignia. Even today, the Indian peasant's favourite guardian of the fields is the sacred cobra. Thus, Kosambi argued that Krishna was not a single historical figure, but compounded of many semi-legendary heroes who helped in the formation of a new food-producing society. "The Bhagavad Gita was put into the mouth of Krishna only because he had by then a powerful following among the food producers, who worshipped him for various reasons: as the first to abolish fire sacrifices of cattle to Indra, the husband of the local mothergoddesses, or the ancestral Yadu father-god" [2002: 403].

Kosambi's "Social and Economic Aspects of the Bhagavad Gita", a socio-economic analysis of the Bagavad Gita, is one his best-known essays on religion [1962: 12-41]. The Gita is, for all practical purposes, the most important scripture of the Hindus. It has therefore been subjected to a variety of interpretations, beginning with the religious philosophers of the early medieval period to the political leaders of the 20th century. They have arrived at wildly divergent conclusions regarding its basic tenets. The reason for this, Kosambi argued, is the essential ambivalence of the Gita. Practically anything can be read into it by a determined person, without denying the validity of a class system. "THE GITA FURNISHED THE ONE SCRIPTURAL SOURCE WHICH COULD BE USED WITHOUT VIOLENCE TO ACCEPTED BRAHMIN METHODOLOGY, TO DRAW INSPIRATION AND JUSTIFICATION FOR SOCIAL ACTIONS IN SOME WAY DISAGREEABLE TO A BRANCH OF THE RULING CLASS upon whose mercy the brahmins depended at the moment" [emphasis in the original, 1962: 15]. The technique

that Krishna adopted in unfolding his philosophy of desireless action in the *Gita* was to set out each doctrine in a sympathetic way without dissecting it and skilfully passing on to another as Arjuna asked an uncomfortable question. Thus we have a "brilliant (if plagiarist) review-synthesis" of many schools of thought, which were in many respects mutually incompatible. The incompatibility is never brought out; all views are simply facets of the one divine mind. The best in each system is thus derived naturally from the high god. Indeed, "the utility of the *Gita* derives from its peculiar fundamental defect, namely, dexterity in seeming to reconcile the irreconcilable" [1962: 17].

Kosambi explained that such a dovetailing of the superstructure was possible only when the underlying differences were not too great. Thus, the Gita was a logical performance for the early Gupta period - the time of its composition - when expanding village settlements brought in new wealth to a powerful central government, when trade was again on the increase and many sects could obtain economic support in plenty. To treat all views tolerantly and to merge them into one implies that the crisis in the means of production was not too acute. "Fusion and Toler-ANCE BECOME IMPOSSIBLE WHEN THE CRISIS DEEPENS, WHEN THERE IS NOT ENOUGH OF THE SURPLUS PRODUCT TO GO AROUND, AND THE SYNTHETIC METHOD DOES NOT LEAD TO INCREASED PRODUCTION" [emphasis in the original, 1962: 31]. The Gita might help reconcile certain factions of the ruling class. Its inner contradictions could stimulate some exceptional reformer to make the upper classes admit a new reality of recruiting new members. But it could not possibly bring about any fundamental change in the means of production, nor could its fundamental lack of contact with reality and disdain for logical consistency promote a rational approach to the basic problems of Indian society.

But, Kosambi added, the *Gita* did contain one innovation, which fitted the needs of a later period – 'bhakti', or personal devotion. Bhakti was the justification, the one way of deriving all views from a single divine source. "With the end of the great centralised personal empires in sight...the new state had to be feudal all the way through from top to bottom" [1962: 31]. The essence of fully developed feudalism is a chain of personal loyalty; not loyalty in the abstract but loyalty with a secure foundation in the means and relations of production. To hold this type of society and its state together, the best religion is one which emphasises the role of bhakti, personal faith, even though the object of devotion may have clearly visible flaws. And the *Gita* suited the need admirably. Kosambi was emphatic and categorical, as usual.

Herakles and Oedipus

Kosambi's originality was primarily derived from his creative application of the Marxist method of analysis, and the amazing breadth of his scholarship, which included a deep familiarity with a variety of sources – archaeological, textual and ethnographic. Added to these were his expertise in the languages of the early Indian texts and inscriptions, his engagement with a range of theoretical literature, and an international perspective. He also had an uncanny knack of making connections between apparently disparate pieces of information, which was basically intuitive, but in his case strengthened by a holistic knowledge of

the field and a passionate desire to understand the civilisational trajectory of India. And his analytical rigour, which did not allow a lazy or careless gap in the argument or a sloppy generalisation, and his vision of a total history, made him a unique historian. We have never had a historian quite like him, either before or after. It is possible to fundamentally disagree with Kosambi, but it is difficult not to appreciate the quality of his mind. More than 40 years after his death, his writings remain inspirational.

One can cite two striking examples of his ingenuity and scholarship from his treatment of the mythology of Krishna. Kosambi observed that late in 4 BCE, invading Greeks found that the worship of an Indian demi-god, whom they equated immediately with their own Herakles, was the main cult of the Punjab plains, while Dionysos continued to be worshipped in the hills. He suggested that this Herakles was "unmistakably the Indian Krishna" [1975b: 117; 2002: 393]. He pointed out that the Greek hero was traditionally a matchless athlete burnt black by exposure to the sun, who had killed the Hydra (a many-headed snake like Kaliya) and violated or wedded many nymphs. Kosambi did not pursue the point, but Benjamin Preciado-Solis wrote a monograph in the 1980s elaborating on the identification of Krishna with Herakles, systematically matching their heroic feats, such as Kaliya with Hydra, the demon horse Keshin with Diomedes' horse, and the bull Arishta with Achelous.15 One can multiply such examples.

The other relates to the application of an unusual discipline for an avowed Marxist. Kosambi observed in connection with Krishna's killing of Kamsa, his maternal uncle and the king of Mathura, "It should be remembered that in certain primitive societies, the sister's son is heir and successor to the chief; also, the chief has often to be sacrificed by the successor. Kamsa's death has good support in primitive usage, and shows what the Oedipus legend would have become in matrilocal society" [1975b: 116]. It is true that he did not mention the Oedipus complex and only referred to the legend. But he was certainly familiar with psychoanalytic literature and cited it in relevant contexts. While analysing the layers in the Urvashi and Pururavas myth, he wrote,

"Psychoanalysts have maintained that 'drawn from the waters' is an old representation for just ordinary human birth. The treatment by Freud and Otto Rank of this motive propounds that Sargon, Moses, or even Pope Gregory the great...being taken from waters (like Karna in the Mbh [Mahabharata]) is merely a birth story, the waters being uterine or those within the amnionic sac" [1962: 58-59].

Kosambi did not accept this psychoanalytic interpretation as clinching, but he pressed psychoanalysis into service once again to make possible sense of the same motif in a different context. It is not surprising that he was familiar with Freud, but the book by Otto Rank (although Kosambi did not cite it), where the Austrian psychoanalyst discussed mythological instances of birth from waters, including that of Karna, is a comparatively obscure one. Besides, the reference to Oedipus in the context of the killing of Kamsa cannot be entirely impervious to psychoanalytical readings of the legend. Psychoanalysts who have worked on the Krishna cycle of myths suggest that he is the only major character

in Indian mythology who repeatedly and aggressively defies father figures. His making love to Kubja, the beloved of his surrogate father Kamsa, and the subsequent beheading of Kamsa, is the only unequivocal instance of a successful oedipal struggle in the large corpus of Sanskrit mythology. Kosambi showed both insight and discretion in detecting an oedipal resonance in the Kamsa myth and overcoming the traditional Marxist distrust of psychoanalysis.

Kosambi wrote his books and articles on early India between the mid-1940s and 1960s. Predictably, his ideas and attitudes were to an extent influenced by those which were current during that time. Now, historians no longer accept the theory of the Aryan invasion of India, more so as a cause of the decline of the Indus valley civilisation. It is also doubted whether matriarchy, which Kosambi took for granted,19 existed anywhere in the world at any point of time. Instead, historians make use of concepts such as matriliny and matrilocality, which often correspond to what Kosambi and others of his generation meant by matriarchy. It is possible that his somewhat uncritical endorsement of Frederick Engels' formulations on the origin of the family, private property and the state (although he does not mention him) made him accept matriarchy as a necessary stage in the evolution of social formations.20 However, it is difficult to understand why, even in the mid-1960s, a historian so discerning as Kosambi kept referring to tribes as savages. Possibly he borrowed this expression from contemporary anthropological usage. It appears from his works that there was no value judgment involved in this description, but it makes one feel a little uncomfortable when one reads him now.

Despite his very consciously creative use of Marxism, and his explicit contempt for the "official Marxists (hereafter called ом)", he seems to have been a little ambivalent about the applicability of the Asiatic mode of production in the Indian context.²¹ Chattopadhyaya has attributed this to "Kosambi's understanding of the power of ideology..." [2002: xxix]. Kosambi certainly believed in the power of ideology. He repeatedly referred to the role of ideology in minimising violence in Indian history, which brings to mind Antonio Gramsci's concept of hegemony. Despite categorically asserting, "Economic determinism will not do. It is not inevitable, nor even true, that a given amount of wealth will lead to a given type of development" [1975b: 12], on several occasions he came close to such a position. For instance, he explained the sectarian conflict in early medieval eastern India in terms of possession and exploitation of land alone. He wrote that the followers of Shiva or Devi were for a long time great landlords while the worshippers of Vishnu were small producers, and "theological conflict developed only because economic conflict was a reality".22 Needless to say, this view ignores the complexity of religious life in which these sects themselves were each divided into many groups, none as a whole being exclusively associated with any particular social class. At one level, Kosambi was absolutely convinced about the correctness and efficacy of his method. This may explain why he used anthropology primarily as a source of information rather than a method to collect and analyse data. Similarly, there appears to be no other reason why such a brilliant mind and avid reader took no notice of the various approaches to the study of myths available to him, such as structuralism.²³ It also seems to me that the implied teleology of Marxism made him believe in the progress of humanity as the stuff of history. It has been justly pointed out by Chattopadhyaya that his repeated references to the "primitive survivals" in Indian society were not judgmental; they only meant "the vertical continuity of myriad cultural elements, in a state of flux..." [2002: xviii]. However, his unstated but recognisable approval of agents of change leading to an "advance" in society, such as Buddhism, or his critical remark made while commenting on the state of Sanskrit literature under feudalism that "not every new class is progressive...nor does it necessarily perform the task of reorganising the whole society into a new, more productive form" [1975a: 286], indicate his preference for progress in history.

His convictions, deliberate or inadvertent, and his method, conditioned his understanding of the nature and functions of Indian religions. He showed how religious ideas and practices can be read meaningfully when located against the backdrop of the networks of production and distribution. While this approach fundamentally changed our perception of the role of religions in Indian history, it had its pitfalls. For instance, Kosambi's conclusion that the bhakti propounded by Krishna in the Bhagavad Gita provided the ideology to hold feudal society together, was based on his calculation that the Gita was composed "somewhere between 150 and 350 AD" (sic) [1962: 16]. Even if we accept this date to be correct, it has to be admitted that the far-sighted Krishna promulgated a philosophy to suit the needs of a society that was still a few centuries away. However, a number of Sanskritists and historians, such as M Hiriyanna, M A Mehendale, Thapar, Suvira Jaiswal, Arvind Sharma and G C Pande, have suggested a much earlier date for the text, namely 2 or 1 BCE [Bhattacharyya 1996: 215]. If so, it questions Kosambi's assumption that the brahmanical upper class intended to forge an ideology for a feudal society in the composition of the Gita, even though the suggestion was extremely innovative and might have served as a useful ideology at a later date. However, N N Bhattacharyya, a Marxist historian of early Indian religions, considered Kosambi's reading of the Gita "subjective" and commented with disapproval on the "fashion" of "Marxist and near-Marxist scholars" to "connect the Bhagavad Gita with feudalism", which he found "oversimplified" [1996: 222-25]. Thapar pointed out more perceptively that bhakti was not an undifferentiated category and the idea was put to use in various contexts in different ways. The bhakti endorsed by the Gita, for instance, was not identical with that which was taught by the later bhakti teachers. Whereas the single-minded devotion to a deity was retained, the social content changed substantially, and was expressed in a concern with a universal ethic, which echoed that of the Buddhists and the Jains and which permitted the bhakti movements to become powerful mobilisers of various social groups.

It is possible to differ with Kosambi on specific issues, but his greatness as a historian remains undisputed. A L Basham wrote after Kosambi's death that once when he was mildly complaining of pains which the doctors seemed incapable of curing, he thought that their cause might be psychological, "the product of the tension between the unbelief to which his reason compelled him and the deep-seated traditions of his ancestral faith". Basham

tentatively suggested, "as a psychologist of the Jungian school might have done", that Kosambi go on a pilgrimage to Pandharpur and perform all the rituals an ordinary pilgrim would, even if he had no belief in them. Kosambi "laughed, and replied that he could not do this, however beneficial to his health, for thus he would betray his faith in reason and common sense".²⁴ This sums up both the man and the historian of early Indian religions.

NOTES

- 1 A second revised edition of Kosambi's An Introduction to the Study of Indian History was published in 1975, as also an edition of his The Culture and Civilisation of Ancient India in Historical Outline. The first is referred to as 1975a and the second as 1975b in in-text citations and notes. For more details on the books, see References.
- 2 The same idea has been repeated on the role of brahmanas in universalising local cultures, with the refrain "minimum use of violence" in 1975b, p 172.
- 3 In 1975a, he had it in capital letters: "THE ENTIRE COURSE OF INDIAN HISTORY SHOWS TRIBAL ELEMENTS BEING FUSED INTO A GENERAL SOCIETY", p27.
- 4 Kosambi had in 1951 described it as the ceremonial lotus pool pushkara, where men consorted ritually with apsarases, in an article entitled 'Urvashi and Pururavas', which is included in 1962, pp 71-72. 78.
- 5 Although Kosambi never supported the theory of an Aryan race, he consistently used this term to refer to Aryan-speaking peoples who settled in north-western India and spread to the Ganga valley, initially as conquerors.
- 6 In 'The Avatara Syncretism and Possible Sources of the Bhagavad-Gita', included in 2002, pp 383-88.
- 7 See Habib (2007, 'Introduction', p xvi). Also, in a balanced review, Ratnagar has downplayed the role of temples, mother goddesses, "priest kings", and ritual use of the Great Bath in the religion of the Indus valley civilisation (2002, pp 102-15).
- 8 Kosambi wrote four elemental essays on the organisation of the brahmana varna between 1947 and 1960, 'Early Brahmins and Brahminism'; 'On the Origin of the Brahmin Gotras'; 'Development of the Gotra System'; and 'Brahmin Clans', where he extensively deployed techniques of linguistic analyses to arrive at his conclusions. All in 2002, pp 87-188.
- 9 This issue has been discussed in detail by Kosambi in 'At the Crossroads: A Study of Mother-Goddess Cult Sites' in 1965, pp 95-102.
- 10 For instance, Wagle (1995); Chakravarti (1987, 2003), especially, 'Towards a Historical Sociology of Stratification in Ancient India: Evidence from Buddhist Sources', 'In Search of the Peasant in Early India: Was the Gahapati a Peasant Producer?', 'The Social Philosophy of Buddhism and the Problem of Inequality', 'Renouncer and Householder in Early Buddhism', 'Women, Men and Beasts: The Jataka as Popular Tradition' in the latter volume; Sharma (2008), especially, 'Material Milieu of the Birth of Buddhism'; Thapar (1997, 2000), especially, 'Dissent and Protest in Early Indian Tradition', 'The Evolution of the State in the Ganga Valley in the Mid-first Millennium BC', 'The Early History of Mathura: Up to and Including the Mauryan Period', 'Patronage and the Community', 'Ethics, Religion and Social Protest in the First Millennium BC in Northern India', 'Renunciation: The Making of a Counter Culture?', 'The Householder and the Renouncer in the Brahmanical and Buddhist Traditions', 'Millenarianism and Religion in Early India' in the latter volume; and Roy (1996).
- 11 In Kosambi (2002). The essay 'Early Brahmins and Brahminism' in the same book also discusses "a long process of assimilation and adoption" undergone by "the indigenous Brahmanas" on the basis of evidence in the Upanishads (p 95). It refers to an old formulation of Kosambi, which he never gave up. Incidentally, his innovative use of stories in the Upanishads was quite unique in his time, and only recently are historians beginning to explore their potential as historical evidence.

- See, for instance, Grinshpon (2003), Black (2007).
- 12 See, for instance, 1975a, pp 278-92.
- 13 See, for instance, Pollock (2003, 2006).
- 14 For a lucid exposition of the Krishna cycle of myths by Kosambi, see 'The Historical Krishna' in 2002, pp 390-406. Besides, he briefly discusses Krishna's rise to divinity and its significance in 'The Avatara Syncretism and Possible Sources of the Bhagvad-Gita', also in 2002, pp 372-89.
- 15 See Preciado-Solis (1984).
- 16 See 2002, p 388, note 1.
- 17 The Myth of the Birth of the Hero: A Psychological Interpretation of Mythology, Nervous and Mental Disease Monograph Series, No 18, New York, 1914.
- 18 See, for instance, Mason (1980, pp 110-21); Kakar (1978, pp 151-52).
 - The assumption of the existence of matriarchy among the pre-Aryans and many tribes of India is quite central to Kosambi's understanding of Indian society. To cite a few examples, he found traces of matriarchy in the Upanishads (1975a, p 134), thought that Krishna's marriages "were a vital step forward in assimilating patriarchal Aryans to some matriarchal non-Aryans" (1975b, p 116), and that "Matriarchal elements had been won over by identifying the mother goddess with the 'wife' of some male god" (1975b, p 170). "Some tribes developed out of the matriarchal stage" (2002, p 400) and similar comments are very common, and his reading of the evolution of the mother goddess cult ('At the Crossroads: A Study of the Mother-goddess Cult Sites' (1962, pp 82-109), is based on this assumption, although matriarchy is not specifically mentioned in this essay.
- Kosambi was strongly opposed to the mechanical application of Marxist theories to any historical context and was critical of the works of those Marxist historians who ignored the specificities of "the complete historical process" in India. In a letter to G D Sontheimer, written in June 1965, he expressed apprehension about how 1975b was likely to be received by a well known Marxist Indologist in East Germany because he did not mention "the great authorities of Indian history ... namely, Marx, Engels, and Lenin," Chattopadhyaya ('Introduction', 2002, p xxxv, note 32). However, there can be no doubt about his indebtedness to Engels in particular while dealing with the evolution of social formations in early India. Thapar mentions that this view was put forward in the course of a conversation by Charles Malamoud, who translated 1975b into French, and she agreed with it (1993, p 112, note 55).
- 21 Kosambi stated that "The really vexed question is what is meant by the Asiatic mode of production, never clearly defined by Marx", and added categorically that "What Marx himself said about India cannot be taken as it stands" (1975a, p 10). However, in 'Stages of Indian History', published two years earlier, he wrote, "At a low level of commodity production, it is clear that an Asiatic mode did exist ... at least, the term is applicable to India, whatever the case elsewhere" (2002, p 59). On Kosambi's "ambiguity" on the question of the Asiatic mode of production, see Thapar (1993, pp 104-05), and Chattopadhyaya ('Introduction', 2002, pp xxviii-xxix).
- 22 Kosambi and Gokhale (eds), (1957, p liii).
- 23 On Kosambi's neglect of the anthropological method and new approaches to the study of myths, see Thapar (1993, pp 99, 111).
- 24 Related in 'Baba: A Personal Tribute' in R S Sharma (ed), Indian Society: Historical Probings, in Memory of D D Kosambi, People's Publishing House, New Delhi, 1977, pp 17-18.

REFERENCES

- Bhattacharyya, N N (1996): Indian Religious Historiography, Munshiram Manoharlal, New Delhi.
- Black, Brian (2007): The Character of the Self in Ancient India: Priests, Kings, and Women in the Early Upanishads, State University of New York Press, Albany.
- Chakravarti, Uma (1987): The Social Dimensions of Early Buddhism, Oxford University Press, Delhi.
- (2003): Everyday Lives, Everyday Histories: Beyond the Kings and Brahmanas of 'Ancient' India, Tulika, New Delhi.
- Chattopadhyaya, B D (ed) (2002): 'Introduction', Combined Methods in Indology and Other Writings, Oxford University Press, Delhi.
- De, Barun (2007): 'Religion and Material Life in Ancient India' in Irfan Habib (ed), Religion in Indian History, Tulika Books, New Delhi.
- Grinshpon, Yohanan (2003): Crisis and Knowledge: The Upanishadic Experience and Storytelling, Oxford University Press, New Delhi.
- Habib, Irfan (ed) (2007): 'Introduction', Religion in Indian History, Tulika, New Delhi.
- Kakar, Sudhir (1978): The Inner World: A Psychoanalytic Study of Childhood and Society in India, Oxford University Press, New Delhi.
- Kosambi, D D (1962): Myth and Reality: Studies in the Formation of Indian Culture, Popular Prakashan, Bombav.
- (1975): An Introduction to the Study of Indian History, Popular Prakashan, Bombay, second revised edition, originally published in 1956.
- (1975): The Culture and Civilisation of Ancient India in Historical Outline, Vikas Publishing House, Delhi, originally published in 1965.
- (2002): Combined Methods in Indology and Other Writings, B D Chattopadhyaya (ed), Oxford University Press, Delhi.
- Kosambi, D D and V V Gokhale (eds) (1957): The Subhashitaratnakosha, Harvard University Press, Cambridge Mass.
- Mason, J Moussaief (1980): 'Notes on Kubja the Hunchback and Krishna, with Some Observations on Perversion' in The Oceanic Feeling: The Origins of Religious Sentiment in Ancient India, D Reidel Publishing Company, Dordrecht.
- Pollock, Sheldon (2003): 'Sanskrit Literary Culture from the Inside Out' in Sheldon Pollock (ed), Literary Cultures in History: Reconstruction from South Asia, University of California Press, Berkeley, pp 39-130.
- (2006): The Language of the Gods in the World of Men, Permanent Black, Delhi.
- Preciado-Solis, Benjamin (1984): The Krishna Cycle in the Puranas: Themes and Motifs in a Heroic Saga, Motilal Banarsidass, Delhi.
- Ratnagar, Shereen (2002): Understanding Harappa Civilisation in the Greater Indus Valley, Tulika, New Delhi.
- Roy, Kumkum (1996): 'Justice in the Jatakas', Social Scientist, No 275-7.
- Sharma, R S (2008): Material Culture and Social Formations in Ancient India, MacMillan India, Delhi, second revised edition.
- Thapar, Romila (1993): 'The Contribution of D D Kosambi to Indology', Interpreting Early India, Oxford University Press, Delhi.
 - (1997): Ashoka and the Decline of the Mauryas, Oxford University Press, New Delhi, second revised edition.
 - (2000): Cultural Pasts: Essays in Early Indian History, Oxford University Press, New Delhi.
- Wagle, Narendra (1995): Society at the Time of Buddha, Popular Prakashan, Bombay, second revised edition.

Kosambi's Archaeology

SHEREEN RATNAGAR

D D Kosambi offered remarkable insights into the history of ancient India. Does his archaeology measure up to his history? The approach in this paper is to view the internal logic of his hypotheses in archaeology, and to ask if Kosambi did justice to the data available in his time. Did he present a sound data analysis that could be emulated, enlarged, or reworked? The answer has to be "no". Kosambi's site locations were not precise; he was not interested in the typology of stone tools; and his correlations of tool occurrences with sacred sites, of the tribe with an absence of plough agriculture, and of iron technology with agricultural surpluses, were flawed. Perhaps Kosambi's archaeology does not measure up to his history because for him archaeology was only an extension of history. But in order to work with the entities of archaeology, typology and classification are indispensable: as indispensable as is the knowledge of an ancient language for the historian. Failure to engage in the grammar of these entities and an ignorance of site formation processes give rise to faulty generalisation.

or his exploration of the development of Indian civilisation D D Kosambi utilised not only written sources but also archaeology and ethnography. History has been made, he said [Kosambi 1957: xii], not by the glittering autocrat but by ordinary people, often backward and ignorant. Once our preoccupation with ruling dynasties is discarded, it is essential to consider the material conditions in which production was organised in society, to ask how land was held, how metals were procured and so on. And it is archaeology that gives us information about the humdrum, including the tools of production utilised by ordinary people since the dawn of history. Because societies advanced in each age as far as their technology allowed ("man makes himself", he said (ibid: 6), echoing Gordon Childe) the role of archaeology became important to Kosambi's enquiries.

Except for a perceptive piece on Harappan silver [Kosambi 1941], Kosambi's published thoughts on Indian prehistory and protohistory date to the 1950s and 1960s (more precisely, to 1966, the year of his death). By then, several Indus civilisation sites had been excavated by the Archaeological Survey of India (Ası), and the archaeology departments of both the M S University, Baroda and the Deccan College, Pune not to speak of departments further afield in Banaras, Chandigarh, Nagpur, etc, that were active in the field with other kinds of sites. B Subbarao published his pathbreaking The Personality of India in 1958, in which he tried to find regional patterns in the development of prehistoric cultures across the country. In Kosambi's own city, what was then Poona, the department of archaeology at Deccan College was flowering, with specialists such as a geomorphologist, epigraphist, prehistorians, art historian, Sanskritist and archaeological chemist on the faculty.

Deccan College faculty and students had found the Stone Age sites in Gujarat, along the river valleys of the northwest peninsula, Madhya Pradesh and Andhra Pradesh. The department had excavated, by the mid-1960s, sites from Rajasthan to northern Karnataka: Langhnaj, Ahar, Navdatoli and Maheswar, Nasik, Jorwe, Brahmapuri, Sangankallu and Tekkalakota. These spanned the Neolithic, Chalcolithic and Iron Ages. A volume entitled *Indian Prehistory 1964* followed an all-India conference organised by the Deccan College: it was an evaluation and interpretation of material gathered in the last 15 years.¹ Thus there were varied resources available to any scholar residing in Poona who was interested in archaeology.

It would not be fair to evaluate Kosambi's archaeology at a distance of four decades by citing evidence unearthed since his death. The approach here is instead to view the internal logic of his hypotheses and to ask if he did justice to the data available in his time. Was his a body of work that could be carried forward,

Shereen Ratnagar (rshereen@vsnl.com) is an archaeologist who is currently working on tribal communities, past and present.

did he present a sound data analysis that could be emulated, enlarged, or reworked? Did his articulations provoke problemoriented research in the decades to follow, or were his ideas repeated by succeeding generations just because they came from a Marxist?

Before we proceed, it may be well to note that Kosambi's archaeological discoveries (and his interpretations of them) were not published in peer-reviewed archaeological journals such as *Ancient India* (Delhi) or *Antiquity* (Cambridge). Three notes (not full-fledged articles) appeared in 1962 in the anthropological journal, *Man* (London).

1 The Indus Civilisation

Kosambi made several casual but provocative suggestions concerning the Indus (or Harappan) civilisation. His inference that it was not forceful domination by elites, but an ideological glue that held this urban society together was not particularly original, as it came from the Orientalist thinking of Marshall, Piggott, and others who were steeped in the paradigm of India as a land of tradition and religion (in contradistinction to the dynamism of the west). Moreover, it was based on the oft-repeated observation that the excavated weaponry of the civilisation was scant and technologically poorly developed [Kosambi 1957: 62-65, 1970: 64], a generalisation that was not quite satisfactory: there were excavated projectiles of metal and baked clay for attacking the enemy at a distance, and there were also a few stout metal axes and stone mace-heads for face-to-face fighting. Besides, there were what Mortimer Wheeler termed the "defences" of the citadel at Harappa.2

One may contrast this weaponry with contemporary well-developed metal axes and spearheads from western Asia, but the point is that on the Indus plains it was not Mesopotamians or Egyptians, but south Asian people whom the Harappan armies would have fought. And in this region we have no cultures with a well-developed metal technology or armoury. More important, while Kosambi realised that no urban society can be non-stratified or classless, he failed to appreciate that social stratification itself cannot rest on a purely theocratic base (i e, rule by an organised priesthood [Kosambi 1957: 68-69]) – ultimately it must be backed by the threat of the use of force, however much the dominance of the rulers is disguised in the trappings of ritual paraphernalia or divine sanction. Kosambi's belief in religious unification is to me curiously un-Marxist.

Other insights on the Indus civilisation came from his reading of the archaeological evidence in tandem with that of contemporary Mesopotamia and are more valuable. Already in 1955 [Kosambi 1955a: 62], he had seen that the urban fraction in the Indus area was much lower than in Mesopotamia (i e, the cities and urban population of Mesopotamia were, proportionately, very much larger): no one else had cared to engage in such analytic comparison till then. Kosambi suggested – quite rightly – that this contrast was due to differences in agricultural output. For him, much of the reason lay in the absence of canal irrigation and the lack of a heavy iron plough [Kosambi 1970: 58-62] in the Indus region. The iron plough repeatedly reappears like a leitmotif, in his writing; we shall deal with it later, but suffice it to state

here that differences in productivity could have been due to the necessity of lift irrigation in the 'rabi' season in the Indus zone, which meant that agriculture here was much more labour-intensive and required considerable cattle power. This would have severely limited the area a peasant could put under crops in any one rabi season, whereas in Mesopotamia, with its huge cities, irrigation was a matter of gravity flow, canals having to be opened and closed at the right time [Ratnagar 1986]. Thus Kosambi did indeed articulate an idea that proved fruitful.

A point of considerable interest is Kosambi's reading (1941) of cuneiform marks on a rectangular sheet of silver (hitherto uunpublished) excavated in a jar below a Mohenjo-daro house floor. This small piece occurred together with about a dozen others in the jar, most of them bearing "incisions", but it was the only one carrying what looked like Mesopotamian cuneiform writing. Kosambi is put out by the fact that the cuneiform inscription is not mentioned in the final reports on Mohenjo-daro. This may have been due to doubts about the reading. The sign as drawn by him is not a recognisable one in the syllabary of the period, and in Introduction Kosambi (1957: 78, note 10) admits that the experts he consulted were not convinced that this was cuneiform writing. This evidence if substantiated supports the view that silver was coming to India from Mesopotamia, but it may not support Kosambi's suggestion that there was a connection between cuneiform and writing in Sanskrit.

2 Cult Spots and Prehistoric Tracks

What about Kosambi the field archaeologist? In his books and in a few articles he made cultural connections between surface assemblages of microlithic tools, non-brahmanical cult spots, and prehistoric movements or migrations [Kosambi 1962b: 110-51]. When he located a folk shrine where blood sacrifice was occasionally offered and found a microlithic-tool assemblage in the vicinity, he inferred that the cult-spot had hoary origins. (In Myth and Reality (1962b: 82-109) the logic is that the earliest food-gathering cultures had goddess worship, whereas male gods came with pastoralist intruders.) A short distance away, Kosambi would find another scatter of Late Stone Age tools or else another open-air shrine with an aniconic stone. In Introduction [Kosambi 1957: 263-67], he states that the best concentrations of tools were in the vicinity of the cult spots, which, for him, marked the sites of prehistoric camps located at the junctions of tracks used by animal herders and for trade. Kosambi (1962b: 82-85)was struck by the importance of crossroads as places of blood sacrifice through the centuries in this country. He also tried to relate prehistoric tracks with early first-millennium trade routes that affected the location of Buddhist monasteries in western Deccan (ibid: 95-96).

Kosambi was able to conceive of landscapes as dynamic rather than backdrops to human activity. He could transport himself to a prehistoric landscape and people it with a facility that is remarkable and largely accounts for the fascination of his writing. And yet, on deeper investigation, we realise that there are as many holes in this cultural construction as there are in the "pierced microliths" he reported having found [Kosambi 1962a].³ (According to Sankalia (1979: 117) the latter were bits of stone with holes caused by natural processes.)

First, the tools. Kosambi (1957: 51, note 5) says his collections were verified by F R and B Allchin, although it is not specified which particular collections were shown to them. Actually, in a volume dedicated to his memory, the Allchins (1974: 45) remark that Kosambi's archaeology was less successful than his other works. It is not clear whether Kosambi's drawings are of waste flakes or of actual tools. None of his finds feature in *Indian Archaeology – A Review*, the annual published by the Archaeological Survey of India that reports all discoveries in brief, giving the locations and naming the finders. And then, the simple proximity of tools and cult spots cannot be adequate reason to infer a historic or cultural association, especially when it is admitted that these two kinds of phenomena do not occur exclusively in association with one another [Kosambi 1962b: 94].

Links with Stone Age

Neither is there a justification to interpret folk shrines as primordial in existence since prehistoric times. To be fair, Kosambi does warn the reader that the continuity of cult spots does not mean that those who worship there are descendants of stone-age people, still worshipping the same goddess. But in spite of upheavals, migrations, epidemics and population displacements, old cult sites would not be ignored by later settlements, he thought [Kosambi 1962b: 110].4 Thus after the decline of the Buddhist monastic establishment, mother-goddess worship was re-established in the old places. In my experience among tribal people of eastern Gujarat, however, shrines set up along the roads and/or in sacred groves usually endure for about 75 to 150 years; they then fall into disuse and the old lamps, daubed stones and the terracotta offerings are pushed aside in a heap and are forgotten. No person who worships at these sacred places has claimed in my presence that they are centuries-old, leave alone primordial. Their short duration is confirmed by the quantity of offerings that accumulates at these spots.

Not only did Kosambi not care to report his sites in the official annual or journal meant for the purpose, he avoided making a typology of the stone tools,5 confining himself to remarks that certain sites could not be tool-making loci because of the proportion of cores in the assemblages (ibid: 127). He used a number of descriptions such as "excellent", "in profusion", a marked "density of tools", or a "striking deposit of microliths", terms that lack precision. As for the ethnographic analogy with the use of flaked stone by the Dhangar herdsmen to castrate their sheep, why did he think to mention it repeatedly in different publications, when he was honest enough to admit that the Dhangar method of hammering out a tool had nothing to do with prehistoric flaking, that the tools are totally dissimilar and that the Dhangar were unable to identify microlithic flakes of chalcedony as tools [Kosambi 1962a: 435-7; 1967: 35-36 and photograph on p 34; 1970: 42]? Rural people pick up stones for many uses as they go about their everyday lives, but this does not indicate a link with the Stone Age.

Amateurish Archaeology

Now to the prehistoric tracks that are said to have developed into trade routes of the historic period [Kosambi 1962b: 95 ff]. The Late Stone Age endured for many centuries, so that we cannot be

certain that all the assemblages of microlithic tools in a certain area were contemporary. Students may also beware the notion that intensive fieldwork and on-the-ground observation will reveal the exact placing of millennia-old roads or tracks. It is one thing to do basic map work and realise that, at the regional level, Ujjain rather than Chhota Udepur, or Nasik rather than Dahanu, lie on major routes. But on the ground, routes are hard to pinpoint. For instance, river fords and crossings are important points on routes, but a ferry crossing means moving downstream with the flow of the river, so that it is not always easy to pick up the continuing route on the opposite bank. We may suppose that the Mula-Mutha could have been forded in the dry weather, for centuries, at Yeravada (in Pune). But do clusters of tools in Bund Garden and at the Yeravada traffic lights (on opposite banks) prove this? What if the tools on the left bank lie not at the traffic lights, but on Parnakuti hill behind them? Perhaps a family had stopped on one river bank during a hunt, or had spied fish in the river, discarding its tools on the spot after having caught its prey. A flaked-tool assemblage on Parnakuti hill may indicate that after crossing the river, some hunters once went up to scout out the land on the left bank; but it could also be the result of hunters repeatedly using the hill to watch for game, hunters who did not often cross the Mula-Mutha. Besides, not even with careful tool counts and comparative quantification can we distinguish repeated visits from a one-off event.

Lastly, surely the traffic of the Buddhist-period traders, carrying bulky or heavy or precious things over long distances from source to urban consumption point or port, and interacting en route with the monastic establishment, was qualitatively different from the movements of prehistoric hunter-gatherers. Huntergatherers characteristically move their camps over four-five kilometre distances, perhaps wandering off the route a short distance to chase game; they use tracks through forest to stalk game, or to set up traps. Several camps may converge on scarce hotseason water bodies. Hunter-gatherers are known to occupy areas for short periods. Only if one believes that all routes are preexisting givens carved into the physiography of the land, can one claim that hunters' tracks developed into trade routes of the historic period. While the major highways of the country do follow the topography, they fall in place as routes according to and in tandem with the growth of settlements, forest clearance and the laying of fields, herdsmens' movements, and the movements of goods and people. It may be more realistic, then, to look on landscapes as palimpsests. So Kosambi's work has all the freshness and colour of amateur archaeology, but not the rigour required of archaeological reasoning.

In the Poona region Kosambi claimed to have found megaliths: these were not the Karnataka or Vidarbha-type stone-slab sepulchres or cists or stone cairns surrounded by boulder circles. Instead, they were piles of boulders that Kosambi believed were manmade even though there were no burials beneath them. He was tempted to make this inference because he detected grooves in the forms of circles and other designs that he thought could not have been natural marks [Kosambi 1962c]. When Sankalia (1979: 117), however, went to these sites in the company of Kosambi, he did not accept that they were megaliths. Even if they

do turn out to be manmade memorials, it is difficult to accept Kosambi's (1970: 38-39) reasoning that they are the work of cattle herders who made "thicker" flake tools than did sheep and goat herders, the reasoning being that cattle hides are thicker than those of the smaller animals. The leap from the perceived form of microlithic flakes (that were set in pieces of wood or bone for composite tools) to differences in subsistence patterns is not acceptable.

3 Technology

As indicated at the outset, the materialist approach entails delineating a sequence of social formations (the relations and the means of production) and their respective forms of property, labour, and surplus mobilisation. The tools of the past are relevant in that they indicate to us the conditions in which ordinary people engaged in production. Apropos of this paradigm is Kosambi's oft-repeated, but never substantiated or thoroughly argued, view that when the heavy, iron plough was taken into tribal areas hitherto cultivated in the shifting, slash-and-burn, pattern, agricultural production came into its own and large surpluses were produced. Only (iron) plough agriculture was "real agriculture" [Kosambi 1962b: 147], "regular agriculture" [Kosambi 1970: 44]. The other was "primitive" (ibid) and could not produce a surplus.6 This is an echo of colonial thinking on the subject. Ravi Rajan (1998: 218), for instance, quotes a forester's contrast (1920) between shifting cultivation and "real agriculture". The British considered shifting cultivation wasteful, a cause of erosion, primitive, and backward [Prasad 1998]. For Kosambi (1970: 34), there could be no "proper society" until there was a system of surplus production - which takes political incorrectness to extremes, even for the context of the 1960s.

In the greater Indus valley, in Harappan times, Kosambi felt, surplus production had been possible to a limited extent. Even though the plough used then could not have been of iron (which came into use centuries later), the soils here required only a light ploughing [Kosambi 1957:57, 1970: 58-59]. Thus the discovery in the 1960s of the pre-Harappan ploughed field at Kalibangan does not invalidate his argument.

Kosambi (1957: 23) echoed Gordon Childe's observation that iron, which is plentiful on the surface of the earth, is cheap. The "real" plough (ibid: 70) was iron-shod and this alone made possible the systematic settlement of the thickly-forested Ganga plains. As for Maharashtra, it was emphatically stated [Kosambi 1962b: 111] that the village economy spread into this region only in the 6th century BC. Even though the caveat was lodged [Kosambi 1957: 52; 1970: 44] that shifting cultivators of recent times are also capable of wielding the plough,7 the theory is flawed. This merits discussion here, not the least because the equation of the coming of iron with adequate ploughing of the soil and the raising of good harvests that could support ruling elites has been repeated so often that it appears to have become irrefutable.

One wonders how an academic working on archaeology in the 1960s could have failed to note that a number of archaeological sites of the pre-iron, pre-"real-plough" centuries, had been excavated in peninsular India by the M S University and the Deccan College. There were Neolithic-Chalcolithic sites in Maharashtra,

Malwa, Bellary district and the Raichur doab. Some of these have yielded the seeds of multiple crop plants and the bones of domesticated animals. Given the general superimposition, in vertical sequence, of house floors, the evidence of storage facilities, a depth of some nine feet of habitation debris at Jorwe, a one-period Chalcolithic site and intramural burials, these could only have been the villages of sedentary mixed-farming communities. Already in 1955 the excavators of Nasik mound had suggested that its pre-iron occupation lasted several centuries, between the later second millennium and the mid-first millennium BC. Already in 1958 Subbarao had taken many of these sites into account in working out his interpretation of the pattern of cultural development across the various regions of the country. (In fact Subbarao (1958: 150) gave importance to the few copper axes found at some of the Chalcolithic sites and suggested, for his part, that it was these copper tools that enabled groups to clear the peninsular forest and grow crops in the river valleys.) 8

Use of the Plough

Next, agricultural production cannot be reduced to a matter of tools. Ploughing means the dragging of a heavy wooden contraption across a field, to create a furrow in which crumbled soil will give a good micro-environment for seeds to sprout with the first rains and for crop plants to grow. Animal traction introduces energy and manure on the field, but animals require space to walk and turn around: not every jungle clearing will be suitable. Sometimes stony ground, sometimes a slope without terracing, or a field with standing trees, will rule out the use of the plough. The red soils on hill slopes tend to be leached soils, with heavy annual monsoon rain carrying water-soluble minerals deep into the profile and out of the reach of the roots of the crop plants. It may be preferable to leave a substantial tree cover in place so that their roots conserve the soil and to do "garden cultivation" around these old trees with the hoe and digging stick, for a short period, after which the patch will be left fallow. Even on fertile river plains, deep ploughing is not the secret of productivity: in a monsoon region in which there are eight months of dry weather, the less the soil is exposed to the sun and wind, the better. Thus it is known that some tribal people have used iron-blade hoes for tilling the soil.

In his monograph on the Munda country Sarat Chandra Roy (1871-1942)9 referred to tribal agriculture in which the plough played a central role. Conversely, when peasant groups became refugees in the forested highlands of western India, finding the current prices of ragi high, they too would take to slash-and-burn cultivation of this crop [Pouchepadass 1995]. Pouchepadass (ibid: 151) says that a slash-and-burn patch may give a high output even when no ploughing is done on the adjacent plot below. True, Pouchepadass' work is much later than Kosambi's, but even in colonial times Voelcker (1893) had spelt out the flaws in the colonial policy that considered heavy ploughing the only respectable form of tillage: he cited the monsoon climate and its long months of dry weather and the dangers of precious moisture evaporating from the ground; he did not believe that Indian agriculture could be improved with the introduction of heavy iron ploughs; most significant, he appreciated the sound ecological sense behind the system of 'rab', a local form of shifting cultivation on the Western Ghats. And further, if Kosambi had been able to read V Elwin's *Agaria*, a classic monograph on a marginalised tribe of iron smelters, published as early as 1942, his theory about the role of iron in agriculture and peasant and tribal life would have acquired more content and balance.

Thinking in terms of a dichotomy, tribe versus organised society [sic], Kosambi (1967: 31) wrote that as the use of the plough advanced, there was a mutual acculturation, a two-sided "adjustment" providing "both the fabric and the pattern of India's past". He said [Kosambi 1970: 172] the co-option of tribal chiefs by stratified society was not sufficient for the transformation of the tribe: it was the brahmins who carried plough agriculture into tribal villages, and with it, new crops, knowledge of distant markets, and trade. (Perhaps he is right in saying that it was the brahmins who carried a calendar into these areas, but students should not confuse the calendar with a knowledge of the seasons, as is sometimes done.) In contrast, his contemporary Subbarao had seen the fuller picture of tribal life, including huntinggathering, root-crop agriculture, and a range of specialised crafts, including metal work and weaving. Subbarao noted that tribal habitats were for centuries the sources of good wood and metal required in peasant villages and towns. And he underlined the fact that no tribe today uses stone tools [Subbarao 1958: 141ff]. An even richer and more subtle tapestry was woven by Nirmal Kumar Bose - who, incidentally, was also academically active in the 1960s and also combined, in his scholarship, archaeology, Indology, and ethnography.10 Bose (1994) saw many processes of tribal absorption at work in Indian history, among them the advent of craft specialisation amongst tribal groups and the affiliation of some of them, as specialists, with the regional economy; weekly markets and annual fairs that are meeting grounds for people and hubs for the dissemination of knowledge; the institution of the temple; and various local festivals and pilgrimage centres [Later, K S Singh (1985) was to elaborate on these processes]. 11

4 Tribal People

In the first great transformation in history, said Kosambi (as did many others, notably Gordon Childe, before him), appeared agriculture and animal herding. Kosambi (1955b: 308) said the agrarian village economy came to replace the "tribal" [sic] way of life. He tends to mistake Stone-Age hunter-gatherers for tribes, when in fact hunting-gathering-fishing constitutes the pre-tribe stage of cultural development. The tribe as a social formation came into existence only with the coming of agriculture.¹²

Tribal people and their subsistence and forms of ritual, we have seen, were relevant to Kosambi in that they represent "survivals" of "primitive" ways that help us to interpret the bare b(st)ones of the archaeological record. Long survivals were feasible in our country because biodiversity made hunting-gathering-fishing relatively easy [Kosambi 1970: 34]. Indian history is a history of long continuities, he said (which was not a new idea) and it is of primary importance to investigate the tribal presence within the interstices of mainstream society, or within the cities, because the absorption of tribes into the mainstream as castes is

the signature of Indian civilisation [Kosambi 1957: 7, 27-30; 1970: 13]. Kosambi (1967: 30) went so far as to state that among tribes the way of life has remained "largely unchanged" since prehistoric times. This amounts to denying marginalised groups a history and it was an assumption handed down in the Orientalist tradition. Elsewhere, however [Kosambi 1957: 24], he acknowledged that customs may persist down the centuries more in form than in content. Yet to me it is significant that it was his archaeologist contemporary, B Subbarao (1958: 144) of M S University, who noted that in 1953, within an Oraon area in Chhotanagpur, there were old, abandoned (undated) village sites that yielded large numbers of stone tools – which Oraons in the 1950s did not use – and a form of pottery that was in sharp contrast to that in use in 1953. 13

Kosambi was also mistaken in the notion that tribalism equates with matriarchy. He suggests that those who came last to plough agriculture are groups among whom there remain vestiges of matriarchy. This argument loses clarity when he asserts that pastoralist Aryans introduced male gods, because the Vedic Aryans were tribal people. In any case, in standard anthropological theory today there is no such thing as matriarchy – matrilineal succession is another matter. Matriarchy and matriliny are analytically separate phenomena.

Prejudices

Observations of tribal people appear to have been made by Kosambi within the urban metropolis of Poona rather than in tribal villages. He was thus observing small numbers of people who had been dispossessed - deracinated people, in fact. Not only this, he swept all tribal groups - Kadar, Bhil, Santal, Munda - into the "primitive" [Kosambi 1957: 26-27] category, "fossilised" by their inability to take to regular food production, an "obsolete form of society". In contrast, Bose (1940: 44-45), working among tribal people in their habitat, recognised change (as did Subbarao). He showed some prehistoric hand-axes to forest hunter-gatherers who ate roots dug up from deep down in the soil. They said these hand-axes would not enable them to dig out the roots. Even the iron tips of their digging sticks became blunted in the course of digging and the points of these stone axes would break if used for digging. And then there was Roy who corrected his own references to tribal people as "primitive", "superstitious", or at a "low level" of culture, and in the 1930s wrote appreciatively about tribal village councils and oral poetry (even though he continued to speak of "uplift") [Dasgupta 2007: 158-67]. Kosambi made no such self-correction. The settlement of the Vaddar people (today labelled a denotified tribe) was fast turning into a slum, which in his view was "a problem for the Poona municipality" [Kosambi 1957: 32, emphasis supplied]; given small patches of land, the Pardhi began to grow vegetables [which contradicts his statement about their refusal to progress to agriculture] and would, hopefully, begin to purchase soap with their earnings (ibid: 33) - their body odour is mentioned (ibid: 34) in a passage probably more malodorous than anything he could have smelled. In his posthumously published book is the statement [Kosambi 1970: 13-14] that production for self consumption is "precisely the backward, inefficient and local"

75

Economic & Political weekly EPW JULY 26, 2008

system "that has allowed so many older tribal groups to survive...". And then (ibid 15), food gatherers who had turned to begging and stealing were "accurately labelled the 'criminal tribes' by the British in India, because they refused as a rule to acknowledge law and order outside the tribe". One may shrug such prejudice off to the middle class urban culture of the time, but it came from a self-professed Marxist. To my knowledge no one from the trendy, preachy, left (in which category, no doubt, many would include me) has so far regretted such prejudice from the pen of this iconic figure.

5 Concluding Assessment

Kosambi's archaeology, as far as I can tell, left no lasting legacy. His site locations were not precise; obviously he was neither trained in nor interested in the typology of stone tools; and his correlations of tool occurrences with sacred sites, of the tribe with an absence of plough agriculture and of iron technology with agricultural surpluses, were flawed. We cannot excuse his bias against tribal people as typical of his time because anthropologists senior to him had corrected their own biases or else had shown none.

Why does his archaeology not measure up to his history (e g, 1970: 166 ff), with its insights into the predilections of brahmins, the gap between norm and everyday practice, the history of the Sanskrit language, the dreary passages of the *Puranas*, the transformation of Buddhist monastic life between the time of the

Buddha and the establishment of the university of Nalanda, the inadequacies of ayurveda, his superb overview of the interconnections between the style, content and date of the *Arthashastra* and what that tells us about the third century BC, and so many other vivid insights, not to speak of the flow and persuasive power of his text? Or, for that matter, with his courageous and scintillating criticism of K Wittfogel's theory about irrigation and Oriental Despotism?

Perhaps the answer is that archaeology was to him only an extension, back in time, of history. The things we excavate are tangible, but archaeology has no self-evident truths. It has its own data-recovery techniques, and its own units and levels of analysis, from artefact attribute and artefact type, to assemblage and archaeological "culture". In order to work with these entities, typology and classification are indispensable: as indispensable as is the knowledge of an ancient language for the historian. Failure to engage in the grammar of these entities and an ignorance of site formation processes give rise to faulty generalisation.

I would not have laboured these points were it not for the fact that to date there is no body of robust discussion, leave alone criticism, of Kosambi's assumptions and correlations. Not even his bigotry about the "criminal tribes" has evoked a response. His superficial causal connections – thought provoking as they may have been in their time – have been treated by the left as sacred truths. Moreover, other historians have followed suit in the disciplinary "appropriation", with variable results, some bordering on the disastrous. 14



Indian Institute of Management Bangalore

Berneighetta Road, Bargalow 560076 Ptr. +01-80-20083056; Fac: +01-80-28584050 e-mail: tymasism@finit.emeUni Invites applications for admission to the

Fellow Programme in Management (FPM) (equivalent to Ph.D.)

Arms of Specialization: (1)Corporate Statingy and Policy (2) Economics and Social Sciences (3) Marketing (4) Organizational Behaviour & Human Resource Management (6) Finance & Control (6) Production & Operations Management (7) Quantitative Michosis and Information Systems (8) Public Systems (8) Public Policy

<u>Eligibility</u>: See our emballe for datalis. We encourage you to extent access from CAT, GMAT, GRE, or GATE, but will also accept applications without any last access.

<u>Financial Busport</u>: We provide one of the best thandal packages for doctoral studies in India. See website for details.

Here to Apolic: FPM Application forms are bessed free of cost on request from 1st. August 2008, Please write to FPM Office, Indian Institute of Management Bangalone, Bannerghette Road, Bangalone 580076, with a self-addressed envelope size (8" x 12") efficied with stumps for Rs.767- and a self-addressed slip. The application forms can also be downloaded from our website were limb.omet.in from 1st August 2008.

Last delay

(1) For receipt of request for application forms by past: 30th January 2008.
 (2) For receipt of completed application forms: 13th February 2008.

For Area epocific requirements, application form and other information visit our exhalic travelline is well in the rest. In

Given the current disposition in which academic status often rests on ideological positions, one does not expect much self-correction. Yet in the long term it is not enough to be proclaimed as a leftist/secularist/Marxist – the gloss of identification with a

charmed circle will inevitably wear off over time, and then the scrutiny of a person's scholarship will be of a different order altogether. An object lesson, perhaps, for young and not-so-young scholars with professional ambitions.

NOTES

- 1 This volume maintains its historiographic importance until today. Although Kosambi had published short notes on Late Stone Age material (that he had himself found) in the journal Man and had written a discursive text on the cultural significance of microlithic sites in his Myth and Reality (1962b), he did not participate in the symposium. Was he cold-shouldered by the archaeological establishment as an outsider and a Marxist? No: in H D Sankalia's department all were welcome. Sankalia and his students, in fact, went over to see some sites that Kosambi had discovered (it appears that Sankalia rubbished most of these "discoveries" [see Sankalia 1979: 117]). This meeting occurred shortly before Kosambi's death, says Sankalia (ibid), which would make it in 1965 or early 1966. Judging from a review by Kosambi in 1964 of a book by Sankalia, it was Kosambi who had for the latter a disdain that he did not care to disguise.
- 2 Today we also know [Ratnagar 1991: 78-88] that across a few sites the strata that represent the transition from the earlier developmental phase to the mature Indus are characterised by ash layers and cinders, together with the debris of walls and artefacts - obviously the remains of fire and destruction, warfare in other words.
- 3 In this brief note, Kosambi was suggesting that the distribution of microlithic assemblages and cult sites may delineate the prehistoric beginnings of the Pandharpur 'jatra'.
- 4 In one of his posthumous articles [Kosambi 1967: 48], the emphases are somewhat different. The continuity of worship at mother-goddess cult sites is dismissed as implausible because hunter-gatherers and pastoralists were not sedentary peoples.
- 5 The drawings of microliths published in Myth and Reality (pp 133, 134, 151) are amateur work. Stonetool drawings are tantamount to an analysis of their form and function, an indication of how they were made. In Kosambi's drawings the concavity/convexity of flake scars is not indicated; no bulb of percussion occurs on any diagram; nor are small retouch flakes shown along any working edge. An archaeological drawing should depict two if not three sides of a tool, so that the typology becomes evident in the drawing itself, but Kosambi's diagrams except in three cases remain views of one face. Were these, then, actual tools or were they just waste flakes?
- 6 Today the thinking is that "surplus" production is not the production of excess food over basic wants; that it is a factor of distribution and not of production. In other words, the populace surrenders surplus (in grain, labour, or rent/tax) not because it has plenty, but because it is ruled by a dominant elite that has the monopoly of the use of force.
- 7 For a description of this see Hardiman 1995.
- 8 Further down in the text Subbarao says the economic development of Magadha was largely due to the development of iron technology (1958: 155 ff).
- 9 As far as I am aware, Kosambi made only a passing reference to Roy's Mundas and Their Country, first published in 1912. This culture was indisputably tribal, with exogamous lineages, fission and fusion among them over time, the burial of the dead, bride-price, ancestor worship and offerings to tutelary deities in sacred groves, witchcraft, and, most important, communal land tenure. And here, the hill slopes were terraced, embanked, and irrigated and tilled with the plough.
- 10 Bose's essay on the Hindu ways of absorbing tribal culture was published in 1941. He died in 1972.
- 11 Singh (1985) contested the idea of a one-way flow of technology from brahmin to tribe, pointing out

- that there was also the role of artisan tribes, traders, and pedlars. There were also intermarriages, and sometimes when tribal groups were powerful, emulation was in the opposite direction. For instance, in the northern hills, brahmin migrants turned non-vegetarian and married hill women.
- 12 Many hunter-gatherer groups are classed as scheduled tribes according to the provisions of the Constitution. This does not mean that they are analytically the same thing as tribes the Constitution does not set out to define the tribe or the caste, its purpose being to select groups for positive discrimination. Students with doubts on this issue are referred to Steward 1955; Kent 1996 (especially 9-17); and Ingold et al 1988, among others, on hunter-gatherer societies; and to Sahlins 1968 and 1972; Mahapatra 1993; Godelier 1977 (especially 70-96); Kuper 1999: 159-200; and Claessen 2000 (especially 123-132).
- 13 Nowhere does Kosambi refer to the fieldwork or interpretations of Subbarao.
- In a book on Mortimer Wheeler's archaeology and its legacy in India [Ray 2008], is a chapter entitled 'The Indus Civilisation and the Archaeology of Fortifications'. This chapter fails to refer to Wheeler's landmark contribution: his deep trench, about 30 m long, up to 6 m wide, and 14 m deep, across the Harappa citadel wall and "Section HP XXX" that gave the relative date of a fortification; Wheeler was able to distinguish in the cut a mud rampart, a brick wall, a revetment, and a platform abutting on the wall within that cut and the serial order in which they were built; moreover, his stratification was clear enough to show up the horizontal strata against which this perimeter was built, thus giving the whole a relative date. That this was an outstanding achievement of stratified digging is not even acknowledged, leave alone discussed, in this book.

REFERENCES

- Allchin, F R and B Allchin (1974): 'The Relationship of Neolithic and Later Settled Communities with Late Stone Age Hunters and Gatherers' in R S Sharma and V Jha (eds), *Indian Society: Historical Probings in Memory of D D Kosambi*, People's Publishing House, Delhi, pp 45-66.
- Bose, N K (2006) [1940]: 'Prehistoric Researches in Mayurbhanj', Science and Culture 1940, rpt Selected Writings, Centre for Archaeological Studies and Training, Kolkata.
- (1994): The Structure of Hindu Society, A Beteille (ed), revised edn, Orient Longman, Hyderabad (first published 1975).
- Claessen, H J M (2000): Structural Change: Evolution and Evolutionism in Cultural Anthropology, Universiteit Leiden, Leiden.
- Dasgupta, S (2007): 'Recasting the Oraons and the Tribe' in P Uberoi, N Sundar and S Deshpande (eds), *Anthropology in the East*, Permanent Black, Ranikhet, pp 132-71.
- Elwin, V (1942): *The Agaria*, Oxford University Press, London.
- Godelier, M (1977): Perspectives in Marxist Anthropology, Cambridge University Press, Cambridge.
- Hardiman, D (1995): 'Small Dam Systems of the Sahyadri' in D Arnold and R Guha (eds), Nature, Culture, Imperialism, Oxford University Press, pp 185-209.
- Ingold, T et al (eds) (1988): Hunters and Gatherers: History, Evolution, Social Change, Berg, Oxford (two volumes).
- Kent, S (ed) (1996): Cultural Diversity among Twentieth-Century Foragers, Cambridge University Press, Cambridge.
- Kosambi, D D (1941): 'On the Origin and Development

- of Silver Coinage in India', Current Science, Vol X, pp 395-400, reprinted pp 85-94 in D D Kosambi, Indian Numismatics, (ed) B D Chattopadhyay, Orient Longman, Hyderabad.
- (1955a): 'Stages of Indian History', Journal of the Indo-Soviet Cultural Society, Vol 1, No 1 and reprinted pp 57-72 in B D Chattopadhyay (ed), Combined Methods in Indology, Oxford University Press, Delhi.
- (1955b): 'The Basis of Ancient Indian History', Journal of the American Oriental Society, Vol 75, and reprinted pp 308-26 in B D Chattopadhyay (ed), Combined Methods in Indology, Oxford University Press, Delhi.
- (1957): An Introduction to the Study of Indian History, Popular Prakashan, Bombay.
- (1962a): 'Pierced Microliths from the Deccan', Man, January 1962 and reprinted pp 433-37 in B D Chattopadhyay (ed), Combined Methods in Indology, Oxford University Press, Delhi.
- (1962b): Myth and Reality, Popular Prakashan, Bombav.
- (1962c): 'Megaliths in the Poona District', Man, May 1962, note 108, and reprinted pp 438-43 in B D Chattopadhyay (ed), Combined Methods in Indology, Oxford University Press, Delhi.
- (1967): 'Living Prehistory in India', Scientific American, February 1967 and reprinted pp 30-48 in B D Chattopadhyay (ed), Combined Methods in Indology, Oxford University Press, Delhi.
- (1970): The Culture and Civilisation of Ancient India in Historical Outline, Vikas, Delhi.
- Kuper, A (1999): Culture: The Anthropologists' Account, Harvard University Press, Cambridge Mass.
- Mahapatra, LK (1993): 'Customary Rights in Land and Forest' in M Miri (ed), Continuity and Change in Tribal Society, IIAS, Shimla, pp 84-96.
- Pathy, Suguna (1987): 'Class Formation in an Indian Tribe', Social Science Probings, Vol 4, No 4, pp 396-435.
- Pouchepadass, J (1995): 'British Attitudes towards Shifting Cultivation' in D Arnold and R Guha (eds), Nature, Culture, Imperialism, Oxford University Press, pp 123-51.
- Prasad, A (1998): 'The Baiga', Studies in History, Vol XIV, No 2, pp 325-48.
- Rajan, Ravi (1998): 'Foresters and the Politics of Colonial Agroecology: Shifting Cultivation and Soil Erosion', Studies in History, Vol XIV, No 2, pp 217-36.
- Ratnagar, S (1986): 'An Aspect of Harappan Agricultural Production', Studies in History, Vol 2, No 2, pp 137-153.
- (1991): Enquiries into the Political Organisation of Harappan Society, Ravish, Pune.
- Ray, H P (2008): Colonial Archaeology in South Asia: The Legacy of Sir Mortimer Wheeler, Oxford University Press, Delhi.
- Roy, S C (1970): *The Mundas and Their Country,* Asia Publishing House, Bombay.
- Sahlins, M D (1968): *Tribesmen*, Englewood Cliffs, Prentice-Hall.
- (1972): Stone Age Economics, Aldine, Chicago.
- Sankalia, H D (1979): Indian Archaeology Today, Ajanta Publications, Delhi.
- Singh, Kumar Suresh (1985): Tribal Society in India, Manohar, Delhi.
- Steward, J (1955): Theory of Cultural Change: The Methodology of Multilinear Evolution, University of California, Urbana.
- Subbarao, B (1958): The Personality of India, M S University, Baroda.
- Voelcker, J A (1893): Report on the Improvement of Indian Agriculture, Eyre & Spottiswoode, London.

Kosambi and Questions of Caste

KUMKUM ROY

Caste assumed a centrality in D D Kosambi's relentless quest for the origins of Indian society, since for him it was a category to understand socio-economic differences. This essay first investigates how Kosambi conceptualised caste as a structure. It then examines some specific aspects of his study of caste such as how caste identities were constituted, consolidated and even contested. And, third, the essay seeks to contextualise both the issues and methodologies of Kosambi's scholarship within more recent discussions and debates on caste.

it is a privilege to be able to share one's ideas and readings of Kosambi as part of the centenary celebrations of an indubitably (and possibly the sole) iconic figure within the domain of the historiography of early India.¹ What is equally if not more true is that Kosambi remains, 40 years after he passed away, one of the most challenging and demanding of historians. His hypotheses may sometimes seem to border on the realm of speculation, we may often find it difficult to keep pace with his arguments, almost invariably presented with an impatient erudition, yet his concerns with historicising the early Indian past continue to inform our understanding, just as we revisit his wide-ranging methodologies, often eclectic in the best sense of the term.

t is inevitably platitudinous, but nonetheless true to state that

1 The Centrality of Caste

What I will attempt to explore is Kosambi's handling of caste. I will focus on the space the category occupied within his analytical framework, and the related issue of his understanding of the institution. In a sense, this will involve an investigation of the ways in which he conceptualised caste as a structure.

Second, we will examine some of the specific aspects of caste that attracted his scholarly attention. Here, as we will see, he devoted considerable attention to the processes whereby caste identities were constituted, consolidated and even contested. As may be expected, there is often an implicit if not explicit tension between the ways in which Kosambi identified the structural elements of caste and his more detailed investigations of the specific processes that shaped the structure over time. As latter-day scholars, we may find it tempting to brush aside these tensions, which may seem anomalous and confusing. However, it is also possible to revisit these as issues that demand critical investigation. I will also touch briefly on his analytical strategies.

Finally, I will attempt to contextualise both issues and methodologies within more recent discussions and debates on the theme. As may be expected, the exercise is selective rather than comprehensive. While this has its obvious limitations, it will have served its purpose if it succeeds in reviving serious academic interest in an institution that we often take for granted as a given of social history. And we may recall that it is not only caste that is treated as a given. Kosambi, too, often shares a similar fate. His works find mention in the syllabi of some university, but closer investigations indicate that these are rarely read in practice. Informal discussions suggest that his style is often perceived as difficult, and his formulations too sweeping to be accommodated within the framework of courses. It is in this context that it is critical to use the occasion of Kosambi's centenary to return to the issues which drew one of the best mathematical minds of the last

I would like to thank B P Sahu and the members of the Indian History Congress for inviting me to present an earlier version of this paper as part of the panel discussion to commemorate the birth centenary of Kosambi during the 68th session of the Congress, Delhi 2007. Suvira Jaiswal, who presided over the session, initiated many of us into reading Kosambi and understanding caste. I would also like to thank all those present at the Calcutta University Department of History seminar to commemorate Kosambi for their interventions. The paper draws substantially on these earlier versions and the discussion on them. Thanks, finally, to Romila Thapar for her careful reading of the text and suggestions for improvement.

Kumkum Roy (*kumkumr@yahoo.com*) is at the Centre for Historical Studies, Jawaharlal Nehru University, New Delhi.

century away from the domain of formulae and theorems into a relentless quest for origins.

Caste assumed a certain centrality in this quest, as it became, in Kosambi's understanding, a category through which to understand socio-economic differences. It figured explicitly as a vital element in two of the six stages into which Kosambi classified Indian history in an article ('Stages in Indian History') published in 1954. It was also implicit in his understanding of the first stage, which he identified with the Harappan civilisation; he often suggested that the social institutions of the period left their imprint on later developments. The second stage, which he referred to as Aryanisation (Kosambi 2002: 58) was characterised by Kosambi in terms of technological changes, a shift from bronze to iron. It was also a period of socio-economic transformation, defined in terms of a shift from a pastoral-nomadic tribal organisation with a two-caste system to four caste-classes. The third phase was defined in terms of agrarian and political expansion. The former, according to Kosambi, was made possible by harnessing the labour force of the fourth varna, the śūdras, while the latter was typified by the expansion of the Magadhan/Mauryan empire.

Caste and Class

As is evident, caste was undoubtedly one of the most significant categories in Kosambi's understanding of early Indian history. At one level, he equated the institution, often explicitly, with class. In his classic formulation, for instance, he stated: *Caste is an important reflection of the actual relations of production, particularly at the time of its formation* (ibid: xxiii, emphasis original). More elaborately, he wrote (ibid: 59):

India has a unique social division, the (endogamous) caste system. Caste is class at a primitive level of production, a religious method of forming social consciousness in such a manner that the primary producer is deprived of his surplus with the minimum coercion. This is done with the adoption of local usages into religion and ritual, being thus the negation of history by giving fictitious sanction from 'times immemorial' to any new development, the actual change being denied altogether. To this extent and at a low level of commodity production, it is clear that an Asiatic Mode did exist, reaching over several stages; at least, the term is applicable to India, whatever the case elsewhere.

Three critical, if somewhat conflicting ideas find expression in this paragraph: one, an equation of caste with class (under delimited conditions, it is true), an idea that Kosambi frequently reiterated and occasionally substantiated. The second was the religioritual dimension of caste, and its implications for understanding of historical change. Here Kosambi seemed to suggest that caste both represented change as well as became a means of denying it. Many of his detailed studies on specific dimensions of caste relations focused on this particular aspect in all its complexity.

The third idea pertains to an association between caste and social (and by extension historical) stagnation, typified by the Asiatic mode of production. It is possible, with hindsight, to see that the reconstructions of caste as a dynamic institution that Kosambi developed with painstaking scholarship informed with imagination, expressed in his typically provocative and incisive style, was at variance with the soporific societies considered characteristic of the Asiatic mode of production. Perhaps we can explain his invocation of the Asiatic mode in terms of his

exasperation with the pace and direction of social change in his own milieu: we find him reverting, time and again, to the hope that the caste system would wither away. In 1953 ('The Study of Ancient Indian Tradition') he wrote (ibid: 415):

Its [the caste system's] supposed unshakeability and inherent strength vanish as soon as new forms of production come in: when railways jumble people together regardless of caste and are much more efficient as well as cheaper for the passenger than a bullock cart; when factories produce better goods cheaper, employing labour that has no casteguild technical secrets of any use at the machine. The modern Indian city implies productive relations not based upon caste, often in conflict with caste, whence the system is least effective in our cities, in contrast to the villages.

Sadly, these hopes, as indeed many others, have been belied by the historical processes that Kosambi tried to both understand and shape.

2 Does Caste Equal Class?

One of the ways in which Kosambi developed the equation between caste and class was through his analysis of the category of the śūdra, arguing that this social group initially equated with the dāsa, represented slaves maintained by the community, who later acquired a position almost identical with that of the Spartan helots. In other words, he visualised the śūdra as constituting a class of more or less dependent labourers with virtually no independent access to productive resources. This was spelt out in stark clarity in one of his earliest articles, titled 'The Emergence of National Characteristics among Three Indo-European Peoples' that appeared in 1939:

The most important function of the system was to prevent the worker, the śūdra, learning the use of weapons and from learning to read and write. He had no share in the culture of his age and country. He could not resort to armed revolt. There remained no way for him to keep his traditions alive, if indeed he had had any in the pre-Aryan days; no means of expressing his agony or communicating extensively with his fellow sufferers: no escape except through religion. Even a change of rulers did not bring about a change of caste. The Brahman relieved the warrior caste of the need of constantly policing the state to prevent an armed uprising. The benefits of an extensive helotage were obtained without Spartan efforts (ibid: 758).

At the same time, in an essay titled 'Early Stages of the Caste System in Northern India' that appeared in 1946, he held that (ibid: 196):

It should not be forgotten, on the credit side of the caste system, that the early reduction of the $\pm \bar{u}dra$ to serfdom or helotage freed India from slavery and slave-trading on a large scale. It also allowed new land to be opened up and settled with an early development of a stable agrarian economy which gave the country its economic power as well as its basic unity in spite of great local variations.

Located as we are in the 21st century, in a world complicated by the diverse manifestations of globalisation, we might find it difficult to share Kosambi's optimistic vision of progress at the cost of those located at the bottom of the socioeconomic hierarchy.

Yet, fortunately for us, Kosambi pursued the specific with as much, if not more zeal than he brought to his quest for generalisations. This is evident, for instance, in the short piece titled 'The Working Class in the *Amarakośa*' that appeared in 1954-55. Here

he argued that the organising principle of the text was hierarchical (ibid: 285 ff). Having established this, he went on to elucidate the working of this principle in the case of the 'sūdra varga'. This included several categories ranging from the 'kāyastha' (scribe) to the 'candala' (one of the "untouchable" categories according to the brahmanical tradition) regarded as the offspring of "mixed" marriages between men and women belonging to different varnas. More specifically, the list included several crafts groups: the garland maker, potter, mason, weaver, tailor, painter, armourer, leather-worker, blacksmith, goldsmith, bangle-maker, copper smith and carpenter. Also present were those who provided services, including the barber and washerman, as well as a whole range of entertainers. They were followed by hunters, trappers and butchers, who were succeeded by labourers, the bhrtaka, 'karmakāra' and the 'vaitanika' (labourers and wage earners) amongst others. Further down the list were various categories of near servile and servile populations. They in turn were succeeded by the 'candalas', 'nisadas' (forest people), Śabaras, 'Pulindas' (tribal groups) and 'mlecchas' (a term used to designate a wide range of "outsiders"). The list ended with a set of animals including the dog, followed by a set of terms for thieves. By drawing attention to such lists and their implications, Kosambi moved away from the relatively simplistic equation between śūdras and helots to a far more complex socio-economic scenario, one that had scope for dynamism and diversity. In this one can see ideas that were developed, more or less simultaneously, by that other giant of Marxist investigations into early India, Ram Sharan Sharma, whose classic study of the śūdras in ancient India was produced around the same time.

Kosambi's reflections on the vaiśya were relatively less substantial. While he recognised the importance of the vaiśya "settler" and his crucial role as surplus-producer and tax-payer (ibid: 63) this did not extend into more detailed investigations. Could this be because of the relative invisibility of the vaiśya in textual representations and/or as some would argue, the existence of alternative forms of social identity that did not neatly correspond with varna categories?

Also worth noting is that Kosambi did not develop the complement of the śūdra-helot equation at any length. In other words, he did not expend intellectual energy in trying to establish that the brāhmanas and/or ksatriyas exercised a monopoly over productive resources. Clearly, Kosambi was not preoccupied with defining the material bases of these varna categories. As we will see, his discussions on both these categories, especially the former, were substantial. However, these focused on issues of socio-political identity and the ways in which ritual was both envisaged and enacted.

As is evident, even as Kosambi argued that caste is class, the equation was, for him, rarely simplistic, or even simple. In 'Living Prehistory in India' that appeared in 1967, he pointed out that there are categories that appear to be tribal in present-day (as well as past) caste lists (ibid: pp 31-33). This, according to him, merited explanation. He worked with a definition of tribes as being typically food-gathering peoples, characterised, amongst other things, by a bounded homogeneous social universe. This homogeneity was maintained by prohibitions on marriage outside

the group, and restrictions on sharing food with strangers. In other words, he suggested that two of the typical features of the caste system, connubium and commensality in the jargon of sociologists, owed their origin to tribal practices.

At the same time, Kosambi was quick to point out that the acceptance of these practices within the framework of caste society did not mean that tribal people were treated with respect. Their position, he argued, depended on their ability to generate resources in general and produce a surplus in particular. He suggested that tribes people who were assimilated within the caste order would have had a higher status than those who remained outside, because the shift to food production, that he considered typical of caste societies, would enable them to support larger populations. In an essay titled 'The Basis of Ancient Indian History' that appeared in 1955, he wrote (ibid: 312):

The major historical change in ancient India was not between dynasties but in the advance of agrarian village settlements over tribal lands, metamorphosing tribesmen into peasant cultivators, or guild craftsmen.

However, as we will see subsequently, there were also other ways in which he conceptualised the tribe-caste interface.

3 In Search of Origins

Kosambi often attempted to distinguish between the origin of the caste system and later developments within the institution. Let us examine how he visualised the first of these processes. He contextualised this in terms of a pre-existing stratified society, that of the Harappan civilisation. The first plank of the argument was that urbanism presupposed social hierarchies. This in itself is unproblematic and may seem almost self-evident. Where Kosambi stepped in with a degree of imagination and, some would perhaps feel, unwarranted speculation was in suggesting that priesthood and ritual authority were probably important in maintaining social control in Harappan society. From this, he went on to suggest that survivors of the Harappan priesthood negotiated with the Aryan ruling elite. These complex negotiations and interactions, according to him ('On the Origin of Brahmin Gotras', originally published in 1950), resulted in the emergence of the fourfold varna order, with the brāhmana claiming ritual superiority, while conceding political precedence to the ksatriya (ibid: 126).

One of the most explicit and lucid statements of this appeared in 'Early Stages of the Caste System in Northern India' (ibid: 200):

It is at least plausible to assume that these Brāhmanas were associated with the rich pre-Aryan Indus valley culture, discovered by our archaeologists; a culture that may have been destroyed by Aryan invaders or died out because of the shift of the Indus. This passage-over of sections of the conquered as priests to the conquerors would account for the many discrepancies between Vedic and epic records, and for the rewriting of so much Indian tradition. It would account also for the early systematic development of Sanskrit grammar, generally necessary when a complicated foreign language has to be studied. In the same way, the astounding development of religious philosophy in India at a very early date again supports the hypothesis of violent assimilation as it speaks for the unhappy existence of a cultured priest-class.

The process that Kosambi thus reconstructed enabled him to explain variations and changes within the brahmanical tradition.

However, he could hardly have anticipated that nearly 60 years later, the relationship between the Harappans and the Aryans would become, to use a popular term, "controversial" in more ways than one. In a situation where, in the 21st century, we now have a vociferous view proclaiming the identity of the Harappan and the Vedic, we may soon have a curious situation where some of the contents of Kosambi's scholarship are selectively appropriated, to suggest "parallels" between the two traditions. What possibly prevents such co-option is the distaste with which Kosambi's overarching Marxist perspective is viewed in such circles.

On the other hand, most Marxist and many non-Marxist historians find themselves committed to emphasising the disjunctures between the Harappan and the Vedic (and sometimes later) traditions, and are suspicious, perhaps justifiably, of notions of survival and continuity from the former into the latter. In other words, there is an implicit if not an explicit distancing from the origins of caste as envisaged by Kosambi. Some may also suggest that looking for an originary moment for this complex institution may be an exercise of limited relevance.

Spread of Caste

In a sense, Kosambi's ideas on the ways in which caste was perpetuated and spread to several parts of the subcontinent are perhaps more relevant today. In 'The Basis of Ancient Indian History' he conceptualised this as the outcome of two simultaneous processes:

First, the kings use brahmanism and village settlement to make themselves independent of tribal usage and tribal economy, and to introduce caste as a regular class structure into their territory; secondly, the brahmins themselves accept all sorts of local superstition, ritual, worship, even service of guilds, becoming a cartilage group which secured the adherence to society of elements that would otherwise have been antagonistic (ibid: 320).

To paraphrase his other well known formulation, he seemed to be suggesting that caste relations were generated both from above and below. He cited examples of the complexities generated by this process. Given the nature of sources, these pertain to ruling elites. These included the classic case of the Sātavāhanas who claimed to be brāhmanas, a somewhat anomalous identity for a ruling lineage. To complicate matters further, they married into the ruling Śaka lineage of the region (ibid: 321). The Śakas, as indeed several other social groups, were designated as mleccha within the brahmanical tradition.

Also worth revisiting are his ideas on the 'Indo-Aryan' Nose Index' (ibid: pp 524 ff) originally formulated in 1958. While the specificities and technicalities might seem obscure to the social historian, what is evident is Kosambi's steadfast refusal to reduce caste to race. Particularly noteworthy is his denial of the possibility that variations in physical appearance, such as they were, could be explained mainly or solely in terms of genetics. He stressed the need to consider other factors that could influence physiognomy – including diet, occupation and environment. Additionally, he pointed to the weaknesses of the sampling procedures adopted. While supposedly random, these were in fact biased in favour of the presuppositions with which Risley, the proponent of the nasal-index/caste status equation, worked. Besides, he drew attention to the fact that caste endogamy, with

its implications of frozen social relations was a brahmanical ideal. The real world was far messier, with caste mobility as an option that was open to the wealthy and the powerful. In his inimitable style, he pointed out that in earlier times:

Greedy brahmins found without difficulty if suitably rewarded, for any person an eponym among the 'Aryan' heroes. Moreover, there exists a quite expensive ritual of 'rebirth', that permits a change in the caste affinity, independent of the nose index (ibid: 533).

In other words, Kosambi dismissed the possibility of caste having its roots in some immutable, natural, biological state in no uncertain terms.

4 Who Were the Brāhmanas?

Some of Kosambi's most substantial investigations into the caste system focused on a somewhat different set of issues – of which the constitution of the brāhmana varna is possibly the most significant. To some extent, this sprang directly from the centrality he assigned to caste in his understanding of historical processes. Consider, for instance, the following ('The Basis of Indian History'):

The position of the Brahmin (whether immigrant or risen from tribal priests) as tool for change of status is not to be doubted; he traced not only the theological but the real foundation of absolute monarchy by helping form the defenceless, agrarian, non-tribal village, first providing social contact beyond the tribe (ibid: 317).

In one of his earliest essays on the theme ('Early Brahmins and Brahmanism', 1947) he opened up Patanjali's *Mahābhāsya* and the Upanisads to highlight potential differences in physical appearance amongst brāhmanas, some of whom could be fair skinned, while others were dark. While Kosambi's suggestion that this was indicative of racial diversity (ibid: 87-90) may seem dated, it is important to remember that this was for him part of a larger project, of establishing the heterogeneity of the brāhmana varna, which was often masked by the veneer of a monolithic ideology, typically codified in the 'śāstras'.

This is evident, for instance, in Kosambi's detailed discussion on the brāhmana gotras ('On the Origin of Brahmin Gotras', 1950). Here, the argument he advanced was complex and sophisticated: gotras, originally cow pens, symbolic of shared property rights, were attributed to ruling lineages. Gotra identities were then extended to priests, not necessarily Aryans, a term that is invariably non-racial in Kosambi's work. Subsequently, the priests acquired a monopoly over such identities, lending them on occasion to ksatriyas and vaiśyas in ritual contexts (ibid: 99).

Amongst other instances, he elucidated this process through an examination of the legends of the rivalry between Viśvāmitra and Vasistha that surface in early and later Vedic traditions as well as in the epics and the Purānas. At one level, the two can be seen as competitors for the patronage of chiefs or kings such as Sudās mentioned in the Rigvedas. However, as Kosambi pointed out, it was not simply a case of conflict over patronage: Viśvāmitra and Vasistha seemed to represent alternative modes of acquiring access to the status of priests. Kosambi drew attention to the fact that, as in the case of several other gotras, Viśvāmitra was associated with a totemic element, 'kuśika', the owl. Vasistha, on the other hand, was of relatively obscure origin. While both were

recognised as archetypal founders of gotras, the attitude towards Viśvāmitra within the later brahmanical tradition was characterised by considerable ambivalence and a more or less grudging acceptance of his position. This, according to Kosambi, could be explained by taking into account that he was a ksatriya who functioned as a priest.

What Kosambi was suggesting is that gotra had become a marker of brāhmana identity. Consequently, the ways in which it was acquired, conferred and hierarchised needed to be understood through a detailed analysis of complex textual traditions. Through his own analysis he demonstrated that brāhmana origins were only seemingly uniform: in effect, brāhmanas were recruited through a variety of social processes. Also, claims to the status of brāhmana could be validated through diverse and even conflicting strategies.

At another level, in his exploration of the specificities of the brāhmāna varna in Kashmir, Kosambi ('Origins of Feudalism in Kaśmir', 1957) drew attention to regional variations in what purported to be a pan-subcontinental social category (ibid: 297-98). He used the evidence of the $R\bar{a}jatarangin\bar{\iota}$ to highlight the range of activities attributed to brāhmanas, some of whom were government functionaries, whilst others were warriors – both deviations from the prescribed occupations for the varna laid down in the śāstras.

If we wish then, to provide an answer to the question with which we began, it is evident that Kosambi provided several answers: brāhmanas were drawn from various groups – pre-Vedic and non-Vedic. They could, moreover, perform a range of functions, both sacred and secular. The abundantly varied traditions of brāhmana origins and brahmanical practices that he documented would point to the dynamism of caste identities, a dynamism that he was sometimes reluctant to acknowledge.

5 The Relationship between Tribe and Caste

Kosambi's exploration of the tribe-caste interface also exemplified the dynamism of caste. At one level, as we saw earlier, he conceptualised tribes as pre-class social formations. At another level, he recognised that the relationship between tribe and caste was often complex. This is evident, for instance, in his discussion on the Licchavis, whom he classified as a tribe, acknowledging, at the same time, that 'khattiya' identities were important within the social formation, evidently trying to capture the process of internal differentiation by taking recourse to apparently incompatible modes of classification.

In 'Ancient Kosala and Magadha' (1952) Kosambi drew attention to the ambivalence towards such groups evident in the brahmanical tradition. On the one hand, they were treated dismissively in texts such as the *Manusmrti* (ibid: 222). On the other hand, they evidently commanded respect amongst their contemporaries, obvious in the marriage between the early Gupta ruler, Candragupta I, and the Licchavi princess Kumāradevī, proclaimed on coins and in inscriptions issued by the Gupta rulers.

That the ambivalence was mutual is evident from another frequently-cited anecdote of the Pali tradition that Kosambi dissected with his typical deftness. This was the story of Pasenadi, the powerful king of Kosala, who wished to marry a Sākyan woman

(ibid: 225). According to the story, Pasenadi could claim such a woman on account of his political strength. At the same time, the Sākyans resented the claim, as they considered him to be their social inferior, and dealt with the tricky situation by passing off a slave woman as a Sākyan. Ultimately, the ruse was discovered and the Sākyans had to pay a heavy price. In the process of recounting this story, Kosambi recognised the validity of these conflicting perspectives on social status. At the same time, he documented the process whereby the category he designated as tribal ksatriyas was destroyed with the rise of the Magadhan empire (ibid: 228).

In his brilliant thumbnail sketch of political history ('The Basis of Ancient Indian History - 1') from the Mauryas to the Guptas (ibid: 311) Kosambi alluded to this process of disintegration and decimation. Here he pointed out that Asokan inscriptions indicate that kingship as an institution was well known along the western frontiers of the Mauryan empire, but was virtually unknown along the other frontiers, where the references are to peoples rather than states. However, the Allahabad Pillar Inscription of Samudragupta depicted an entirely different scenario: it mentions several kings who had been uprooted and contains some of the last available references to 'ganas' or 'samghas', often regarded as tribal oligarchies or republics. Kosambi argued that the intervening centuries had witnessed the formation of monarchical states in several parts of the subcontinent. While many of these may have originated from tribal chiefships, they represented a radical departure from earlier political institutions.

Kosambi's discussion on the tribe and the brāhmana is also illuminating (ibid: p 310). On the one hand, he visualised the brāhmana as an agent of change, transforming tribal societies and assimilating them within a more stratified socio-political order. From this perspective, "the brahmin immigrant into tribal lands was at first an effective pioneer and educator, though inevitably becoming a mere drain upon production". Perhaps more interesting, because less expected, is his designation of a category of "tribal brahmin" whom he located specifically amongst the peoples referred to in accounts of Alexander's campaigns in the north-west. According to Kosambi this priesthood played a crucial role in organising resistance to the invader.

What is evident is that while at one level Kosambi conceptualised tribe and caste as mutually opposed social formations, he explored the intervening terrain, recognising it as a complex continuum rather than as a barren, polarised landscape.

6 The Text and the Field

I had mentioned at the outset that Kosambi's methodologies were often eclectic. On the one hand was his insistence that the scholar needed to step beyond the library or the archive. Consider for instance, his characteristically scathing dismissal of the 19th century debates on widow remarriage in the essay titled 'Combined Methods in Indology' (1963):

That 85 per cent of the population in their immediate locality allowed widows to remarry (and permitted divorce when either party felt aggrieved) made no impression upon the scholars nor upon the authorities on Hindu Law (ibid: 4).

As he never tired of repeating, fieldwork, which included observing tangible material artefacts as well as the more intangible modes of communication in lived, quotidian environments, was, according to him, indispensable for both understanding the past and shaping the future. Kosambi often suggested analogies between present-day practices/events and those of the past. In the light of more recent investigations and more complex ethnographies, it is possible to dismiss some of the specific correlations that he worked out. Nonetheless, the acknowledgement that the frontiers between past and present were porous rather than water-tight allowed him to arrive at insights denied to those whom he described sarcastically as "avoiding any disagreeable contact with anthropology, sociology, or reality" (ibid: 4).

The immense potential of such "disagreeable contact" is evident in his discussion on the gotra system (ibid: 175). Here he pointed out that while the brahmanical textual tradition was seemingly congealed, there were virtually infinite variations on the ground: in south India alone, vaiśyas, who were ascribed a single "gotra" according to the "high" tradition, had as many as a thousand gotras of their own.

It is not surprising that Kosambi viewed the vast textual corpus (mainly Sanskritic) of early India with suspicion and scepticism. In his own words (ibid: 190)

In attempting to trace briefly the main features of the earlier caste system down to the age of the Buddha (fifth century BC) we shall have to keep in mind the brahmanic origin of most Sanskrit texts, and the brahmanic transmission of all of them. As far as accurate historical evidence is concerned, most of these are mere verbiage; an occasional reference is all we have to piece out Indian history, the confusion being aggravated by fantastically ignorant late brāhmana commentators, as well as by that fact that it is a poor Sanskrit word that has less than a dozen meanings.

He used his formidable grasp of ancient and early medieval Sanskrit, Pali and Prakrit textual traditions to highlight the complexities of the caste system in practice. His discussion on the heterogeneity of the category of the Aryan, illustrated through the example of the people designated as Madra (ibid: pp 19-21), is a case in point. Starting from the acknowledged association of the Madras with the north-west, he established that this region in general was recognised as an area where scholarship flourished. The grammarians Pānini and Patanjali belonged to the region; it was also regarded as a centre of learning in the Brhadāranyaka Upanisad. Further, this was independently corroborated by the Jātakas, which almost invariably represented Taxila as a centre of learning.

At the same time, the *Mahābhārata* contains a famous (or infamous) diatribe, attributed to Karna, condemning the Madras as people amongst whom norms of "proper" womanly behaviour are not maintained, and where the ideal constancy of the varna order has been replaced by a state of unprecedented flux. Other sections of the epic suggest that the region was associated with distinctive marital practices, including the payment of brideprice. Kosambi showed that this representation had parallels with the descriptions of social conditions in the region found in Pali canonical literature. He also drew attention to the irony implicit in such opinions being ascribed to Karna, whose own social origins are depicted as being obscure. Note the range of sources Kosambi marshalled to establish his point that the meaning of the term Aryan was context-specific rather than

immutable: works on Sanskrit grammar, the Upanisads, Pali texts, and the *Mahābhārata*. And he concluded the discussion by reverting, typically, to present-day practice:

It might be added that the custom [of marriage with bride-price] is permissible and normal in some 80 per cent or more of the Maharashtrian population; brahmins do not hesitate to officiate (for a consideration) at such weddings (ibid: 21).

Consider another, seemingly trivial instance of the way in which he deployed his virtually encyclopaedic knowledge ('Development of the Gotra System', 1960). In discussing the range of meanings that could be assigned to the term "vrata" he suggested that it could be connected with the notion of food taboos: "vrata has also the meaning 'feeding exclusively upon', proved by *madhu-vrata* for a bee" (ibid: 173). It was this phenomenal ability to draw on both minute details as well as on broader issues of perspective and context that enabled Kosambi to weld together insights from explorations into texts and the field into complex and challenging analyses.

7 Towards Subversive Histories of Caste

Rich and relevant as Kosambi's investigations of caste were, it is necessary to recognise that there were areas that remained unexplored, questions that remained unasked, and consequently unaddressed within his framework. Kosambi attempted to work with the equation between caste and class, defining both with a somewhat narrow precision. Although his own explorations often led him beyond this postulate, one senses that it was a constricting factor as well. The equation was useful up to a point, beyond which it deflected his attention away from certain other facets of caste.

Present-day sociologists,² for instance, have drawn attention to the category of dominant castes, not necessarily identified as brāhmanas or ksatriyas, who owe their power to their control over land in specific localities. Searching for such categories in the early Indian textual and epigraphic material is obviously an avenue worth exploring. Reconstructions of the histories of ruling lineages in the early medieval period point to the potential of such investigations.

Other studies³ have focused on how exchange (including gift-exchange) constitutes social relations, especially those of caste. While the ingredients of these exchanges do not necessarily or always fit in within easily identifiable of means of production, they are nonetheless significant in creating and maintaining caste identities and relations.

But perhaps the most substantive challenges to earlier understandings of caste have emerged from Marxist feminist and dalit feminist perspectives. The former is exemplified in the Indian context in the writings of Uma Chakravarti.⁴ Chakravarti draws attention to the need to reconceptualise both caste and class in terms of gender. This rests on an understanding of class as having a sexual dimension – to be understood not simply in terms of control over inanimate or non-human material resources, but also in terms of control of sexuality and reproduction (both biological and social).

Chakravarti documents how, in both contemporary and early contexts, caste identities are/were often shaped through the

regulation of female sexuality. Thus, claims to high caste status are/were often bolstered by the seclusion of women. Thus gender identities are implicated in and in turn feed into the construction of caste identities. To cite an example that Kosambi would have immediately identified with, restrictions on widow remarriage are often an index of high caste status, ensuring that access to the sexual resources of the woman rest in the hands of the privileged men who constitute her "protectors".

Explorations of the engendered nature of caste can, then, radically alter some of our earlier ideas of both structure and process. Kosambi's stimulating analyses of goddess traditions, where he documented how these modes of worship underwent a process of uneasy accommodation within the brahmanical tradition, came tantalisingly close to opening up these possibilities, but did not lead to any major reformulation of his core ideas.

Dalit feminist studies pose further challenges – systematically contesting tendencies to normalise and naturalise a top-down brahmanical perspective on caste as the only or dominant understanding⁵ by drawing attention to "histories of caste oppression, struggles and resistance" (Rege 2006:13). As Rege points out (ibid: 67):

The theory and practice of women's studies has, from its inception, underscored the relation between knowing and transforming; dalit feminism qualifies this relation further. It places at the centre of knowing, not the unmarked category 'woman' but dalit women who have an interest in overthrowing the system and not rising within it.

It is in this context that Kosambi's reasons for engaging with history bear reiteration:

The principal aim of history, as written hitherto, has been the presentation of great events in a chronological sequence. However, the relative importance of events rarely appears the same to people of another time, place, civilisation, or class bias, so that a mere chronicle

does not suffice. The course of social development, the inner causes which ultimately manifest themselves in the striking events, the driving forces which underlie great movements, have to be made clear before any work can be dignified by the name of serious history. Yet this type of analysis is not always welcome to some historiographers. They, or the people who really condition their version of history, are unwilling to face the inevitable consequences of this procedure. For the implication is necessarily that all history can be so analysed, hence current events; but if so, it follows that the course of events can be influenced by deliberate action, that history has hereafter to be consciously made by those that live it, not merely set down after a safe interval of time by the professional historian. This is clearly dangerous to those who would suffer by the change, usually those in power. Thus such historical writing is labelled subversive. History then remains a means of escape, a romantic pastime, a profession, or a method of inducing submissiveness; it cannot become a scientific pursuit (ibid: 407).

The invitation to write subversive histories remains as challenging as when it was first issued by Kosambi more than 50 years ago ('The Study of Ancient Indian Tradition', 1953). Perhaps the best tribute we can pay to his memory while celebrating his birth centenary is to remind ourselves of the need to write such histories.

NOTES

- B D Chattopadhyaya's edited anthology of Kosambi's essays (Combined Methods in Indology and Other Writings, Oxford University Press, New Delhi, 2002) has proved invaluable for the present exercise. All citations, unless otherwise stated, are from this anthology.
- 2 See for instance, M Srinivas, The Dominant Caste and Other Essays, Oxford University Press, Oxford, 1987.
- For example, G Raheja, The Poison in the Gift: Ritual, Prestation and the Dominant Caste in a North Indian Village, University of Chicago Press, Chicago, 1988.
- 4 Uma Chakravarti, Gendering Caste: Through a Feminist Lens, Stree, Calcutta, 2003.
- 5 See for instance Sharmila Rege, Writing Caste/Writing Gender, Reading Dalit Women's Testimonios, Zubaan, New Delhi, 2006.

SAMFFKSHA TRUST BOOKS

1857

Essays from *Economic and Political Weekly*

A compilation of essays that were first published in the EPW in a special issue in May 2007. Held together with an introduction by Sekhar Bandyopadhyay, the essays – that range in theme and subject from historiography and military engagements, to the dalit *viranganas* idealised in traditional songs and the "unconventional protagonists" in mutiny novels – converge on one common goal: to enrich the existing national debates on the 1857 Uprising.

The volume has 18 essays by well known historians who include Biswamoy Pati, Dipesh Chakrabarty, Peter Robb and Michael Fisher. The articles are grouped under five sections: Then and Now, 'Sepoys and Soldiers', 'The Margins', 'Fictional Representations' and 'The Arts and 1857'.

Pp viii + 364

2008

Rs 295

Available from

Orient Longman Ltd

Mumbai Chennai New Delhi Kolkata Bangalore Bhubaneshwar Ernakulam Guwahati Jaipur Lucknow
Patna Chandigarh Hyderabad
Contact: info@orientlongman.com

Kosambi, Marxism and Indian History

IRFAN HABIB

D D Kosambi profoundly redefined the message that Marxism had for historians. What set him apart from others who "applied" Marxism to Indian history was his determination to maintain, indeed increase the standard of rigour in his factual and textual research, for Marxism dealt with a far more extensive area than the one over which research had conventionally been conducted. Guided by the basic thesis about how social evolution occurs, he rejected the view that India had ever passed through a phase of slavery; rather it was the construction of caste society that happened here. The reasons for his acceptance of a stage of feudalism spanning the period from that of the Guptas to the Mughals are most interesting.

t was a happy day for Indian historiography when D D Kosambi began to take interest in the interpretation of the past of Indian society, doubtless at the expense of his studies in Mathematics, the field where he had already earned so much distinction. This shift of interest was probably not unconnected with Kosambi's own growing sympathies with Marxism. The collection of Kosambi's articles on history, which Brajdulal Chattopadhyaya has assembled with so much labour, contains one published as early as 1938-39, in which Kosambi cites Marx and calls attention to his articles on India, to which he had apparently gained access through a publication by the Socialist Book Club, Allahabad. He was later to express the grouse that the editors of this volume did not tell the reader of Marx and Engels' writings on primitive societies.2 After Hitler's attack on the Soviet Union in June 1941, communist literature began to be widely available in India. Kosambi himself now contributed a paper to the American Marxist journal, Science and Society, as early as 1944, on the issue of caste.3 He was apparently greatly affected by the famous passage in Marx's Preface to his Critique of Political Economy, where Marx concisely enunciates his thesis that historical changes are brought about by the growth of contradictions in each "mode of production", and explains how man's "social being" shapes his action.4

'Applying' Marxism to Indian History

What sets Kosambi apart from some others who began to "apply" Marxism to Indian history around the same time, was his determination to maintain, and, indeed, increase, the standard of rigour in his factual and textual research. His own work on the Sanskrit poet and grammarian, Bhatrihari, published during the years 1945-48 was in the best "Orientalist" tradition. In 1949 in his review of S A Dange's *India from Primitive Communism to Slavery*, published that year, he took Dange to task for his gross errors of fact and lack of linguistic comprehension, and issued a notable caution: "Marxism is not a substitute for thinking, but a tool of analysis".5

In the same article Kosambi noted that "most of our source material was first collected, analysed and arranged by foreign scholars", though he agreed that the British historians' writings had been coloured by their "national and class prejudices". He would not also allow any pandering to nationalist or communal prejudices. This was especially brought forth in his critical review of the first three volumes of the Bharatiya Vidya Bhavan's *History and Culture of the Indian People*, with K M Munshi and R C Majumdar as the principal editors. Observing that Islam's chief contribution to India was to increase commodity production in the feudal period, he noted dryly that this was the period "when Munshis and Majumdars were created, though not their mentality".

Irfan Habib is professor emeritus, Department of History, Aligarh Muslim University, Aligarh.

For Kosambi, Marxism required more academic rigour, not less, while it dealt with a far more extensive area than the one over which research had conventionally been conducted. The post-modernist insistence on the non-separation of subject and discourse had not been heard of in his time; in fact, that separation was basic to his method. The critical tools shaped by "orientalism", or, in India's case, "Indology", had to be perfected further, not thrown away or bypassed. This was the thrust of his influential paper 'Combined Methods in Indology', published in the most "orientalist" of journals, the Indo-Iranian Journal, in 1963.8 Here Kosambi takes up words and concepts and offers important hypotheses on the basis of critical studies of them. He also insisted on fieldwork, that is, looking at customs and practices whether recorded in the past or found, unrecorded, among contemporary primitive communities or, for that matter, among Brahmans, so as to trace earlier situations from later distorted or altered survivals.9

With the knowledge so gained, and constantly expanded, Kosambi embarked on his ambitious project of studying Indian history on the basis of his own understanding of the ideas of historical materialism laid out by Marx and Engels. An early critique of a Soviet writer D A Suleikin in 1951 and, then, a clearly outlined statement of his own views on the stages of evolution of Indian history in 1954 were preliminary indications of where his research and reflection were leading him.¹⁰

Two years later, in 1956, came Kosambi's major historical work, An Introduction to the Study of Indian History, Bombay, which substantiated and extended his views on both how Marxist insights needed to be used to reconstruct Indian history and how history would appear after being thus reconstructed. It was not intended to be a straightforward narrative: it assumed that the reader has read the conventional "bourgeois" textbooks by V A Smith and his successors. After expressly locating his basic approach in Marxist theory, Kosambi eschewed conventional narrative and raised such problems as he thought to be important in successive periods. He, however, often enters lanes and bylanes, linked to the main path of his argument, whether to substantiate a hypothesis by appealing to a distant piece of evidence or just to record a curiosity. He could also go forward and then come back: In his Chapter vII, Asoka came first, and "the pre-Asokan state and administration" later: this apparently seemed to him to be the more convenient way to present his argument.

From a less sure hand, such a procedure might have looked especially idiosyncratic, but the mere weight of what Kosambi had to say reduced all such objections to petty carping.

Periodisation of Indian History

In the first place, Kosambi profoundly redefined the message that Marxism had for historians. In an attempt to impart to the Marxist perception of class struggle and its different forms the colour of universal application, the "Leningrad discussions" of the 1920s had led to the conclusion that the unilinear succession of modes of production, primitive community-slavery-feudalism-capitalism, was followed in practically all countries, except for those with very recent immigrant populations. This thesis played its part in countering the belief fostered in western social

democracy that, in the words of an anti-communist propagandist, Karl A Wittfogel, "class-struggle far from being a chronic disease of all mankind is the luxury of multi-centred and open [that is, Western] societies". But having played its due part in controverting such beliefs, the standard scheme of periodisation began to gravely shackle Marxist historiography. By overuse both "slavery" and "feudalism" seemed to lose all meaning when the most divergent forms of social organisation in different societies went on being assigned to these two categories, just to keep formally to the standard scheme. Kosambi now boldly asserted that Marxist historians ought to take their cue only from the basic thesis about how social evolution occurs, and not blindly apply a single prescribed pattern.

Taking the case of India, Kosambi summarily rejected the view that it had ever passed through a phase of slavery. Rather it was the construction of caste-society that happened here – a cruel form of bondage, but different, nevertheless, from slavery. He argued that the term "Asiatic" occurring in Marx's passage in the Preface to the *Critique of Political Economy* should be taken to cover a case like India's and, for this reason, the term should not be ignored, as had been done in Stalin's interpretation of the passage. This did not mean that he accepted for the "Asiatic", the sense of a stagnant despotic system, as some of Marx's own words would suggest.

Indeed, Kosambi directly contested Marx's observations about the "unchangeableness" of Asiatic societies. Conceding that these remarks were "acute and brilliant", he yet held that the proposition was "misleading" and "cannot be taken as it stands". It was as if Kosambi was inviting historians to take Marx's method and apply it to Indian history on a clean slate; and his own book was to serve as an illustration of what could be achieved if this was done.

What Kosambi set out to do in his *Introduction* was, therefore, to investigate both the economic basis ("the means and relations of production") and the changing beliefs, customs, and culture ("superstructure") and their mutual relationships. In carrying out this task he raised questions that conventional historians too found challenging and exciting. For example, should not the technology of production be closely studied, so as to understand the nature of the social organisation that corresponded to it? Quite early in his book he commented:

The villages did not exist "from times immemorial". The advance of plough-using agrarian village economy over tribal India is a great historical achievement by itself.¹⁴

Before Kosambi, little work had been done on the history of technology in India; his senior friend, P K Gode, was practically the lone scholar in the field, with a series of papers on the most diverse devices and processes of manufacture in ancient and medieval times. But the evidence available had not yet been assembled and critically analysed. Kosambi underlined the importance of this aspect of history by his numerous references to tools and products, such as the late use of the shaft-hole axe or the arrival of the coconut no earlier than the first century AD.¹⁵

On the other side of the spectrum was religion: Kosambi saw in religious beliefs and ritual the reflections of economic and social

circumstances which he so loved to trace often in minute detail.¹⁶ Religion was also the means by which exploited classes could be kept reconciled to their position, believing it to be divinely ordained, and, by such consent, reducing the amount of violence (with the expenses involved) which would be otherwise needed to keep them under control.¹⁷ To Kosambi, this role of religion provides the key to a proper understanding of the rise of the caste system.

Rise of the Caste System

To begin with, he had no quarrel with the suggestion made by many Indologists that the Shudra class arose largely out of the subjugated Dasas, though some of the latter were admitted into the Aryan fold as well. Such a situation, however, would not of itself create a caste system as the parallel Iranian development showed.¹⁸ The evidence as to how castes were created could be seen in the evolution of the priestly Brahman caste.

Kosambi shows that Brahman priests did not belong to any tribe and there were non-Aryan priests who also entered their ranks. He concluded that the Brahmans created the model for the other castes: "With him (the Brahman)", he says, "begins the later reorganisation into caste".19 The priest served not only as the model but also, of course, the religious spokesman of the caste system. There was another process too behind the formation of castes, namely, "tribal elements" being "fused into a general society".20 Kosambi appeals to contemporary ethnography to show how endogamous tribes or clans have been absorbed into society as castes.21 In a sense, then, priestly consolidation, on the one hand, and tribal absorption into the agrarian population, on the other, have been the historical sources for the creation of a caste system, serving for India's major institutional frame for exploitative relationships. One can here go back to what Kosambi had said in his 1954 ISCUS article:

Caste is class at a primitive level of production, a religious method of forming social consciousness in such a manner that the primary producer is deprived of his surplus with the minimum coercion.²²

Indian Feudalism

Kosambi has much to say in the *Introduction* about the growth of the states, the rise of Jainism and Buddhism, the punch-marked coins and the economy of the Mauryan Empire. Important as many points made by Kosambi about these themes are, lack of space forbids a discussion of these here. However, one cannot leave Kosambi's reconstruction of Indian history without a comment on his acceptance of a stage of feudalism spanning the period from that of the Guptas to the Mughals.

Kosambi recognised that the elements of demesne-farming and serfdom, crucial to the Marxian perception of feudalism as a mode of production, were missing here; but he believed that other features were common between the Indian and European forms, viz, low level of production techniques, growth of rusticity and decline of urban life, political decentralisation and service tenures, and that these justified one to designate the mode of production in India for well over a millennium as "feudal".²³ In the political and fiscal spheres, he discerned two different processes

of feudalisation: (1) "From above", when centralised states created local rights by grants and concessions; and (2) "From below", when "landowners developed from within the village [to stand] between the state and the peasantry". There seems to be an echo here of Marx's formulation about capitalists emerging from above (merchants) and below (craftsmen). It may be noted that Kosambi's remarks about the period of Muslim dynasties (thirteenth to seventeenth centuries) also contain many important insights and suggestions: For instance, we have from him the significant proposition that "Islamic raiders" played "a role similar to that of the Aryans over two millennia earlier, in breaking down hidebound custom, in the adoption and transmission of new technique". 25

One needs to stress that like any work of history, Kosambi's work too is limited by the evidence available at the time it was composed; and there is the further matter of the range of an author's own extent of knowledge (vast enough in Kosambi's case) and his own subjective preferences when attempting an analysis of existing evidence. Kosambi asked questions few or none had asked before, and as a pioneer many of the solutions he proposed needed verification. Some assumptions (such as the one regarding the absence of plough in the Indus Civilisation) were not sustained as more evidence came to light. For Kosambi himself, the *Introduction* was not the end-product of his research. He continued to contribute research papers and published two important collections of essays,26 and a straightforward restatement of his major findings in The Culture and Civilisation of Ancient India in Historical Outline, published from London in 1965.27 Death took Kosambi away the very next year when he was at the height of his powers - not yet even 60. But he had done enough to ensure that history-writing in India would not be the same again.

A Personal Note

On late December evening in 1963 at Pune, Barun De (later to be professor and director, Centre for the Study of Social Sciences, Kolkata) and I called on Kosambi at his house. I had arranged the interview on telephone but perhaps I was not able to explain clearly who both of us were, since we had no claim on his attention other than a desire to have his darshan. He apparently thought we were some Soviet scholars. As may be imagined he was none too pleased when he found that we were not the guests he expected. A certain coolness on his part was the natural result and Kosambi was not the one to hide it. He spoke acidly of his bad experience with some people at my university (Aligarh) where he had served early in his career. Seeking to turn the conversation into other channels, Barun mentioned that we were due to attend H D Sankalia's lecture the next day. This too did not help matters: "Oh, Sankalia! He would show you how the primitive people of Narbada culture had windows in their houses, as if they were cottages in Sussex." (Sankalia must have had some telepathic means of knowing about our conversation, because the next evening he began his lecture with a respectful reference to Kosambi as a theoretician, while he himself was only a fieldworker. The windows, however, were there on the slides.) When exactly

Economic & Political weekly EPW JULY 26, 2008

Kosambi changed his mind about us I cannot tell; but soon enough we found him showing us microliths and explaining why you could not cross the Ghats along just any straight line you choose. Even a sudden recollection that I had in an article in *Seminar* expressed reservations about his hypothesis of feudalism from above and below did not lessen his gracious friendliness, and he continued telling us about properly

interpreting prehistory and tracing its distorted survivals in living communities. We had an evening to remember all our lives. Kosambi later visited Aligarh especially to see the early iron site of Atranji Khera. He had wonderful stamina, and when I received him at the railway station, he insisted on carrying his own rucksack. Who could then imagine we would so soon lose him for ever?

NOTES

- 1 'The Emergence of National Characteristics among Three Indo-European Peoples', reprinted: D D Kosambi, Combined Methods in Indology and Other Writings (ed), Brajdulal Chattopadhyaya (henceforth Combined Methods), pp 753-61. A very useful list of Kosambi's publications would be found in V V Gokhale, 'Damodar Dharmanand Kosambi', in R S Sharma and D N Jha, Indian Society, Historical Probings: In Memory of D D Kosambi, New Delhi, 1974, pp 4-15.
- 2 An Introduction to the Study of Indian History (hereafter, Introduction), Bombay, 1956, pp 15-16, fn 15.
- 3 Combined Methods, pp 773-79.
- 4 Karl Marx, A Contribution to the Critique of Political Economy, trans S W Ryazanskaya (ed), Maurice Dobb, Moscow, 1978, pp 20-22. This passage has been quoted most widely, perhaps of all of Marx's pronouncements, and the English renderings of the German original have varied.
- 5 'Marxism and Ancient Indian Culture' in *Combined Methods*, pp 784-89.
- 6 Ibid, p 785.

- 7 'What Constitutes Indian History' in *Combined Methods*, pp 790-96; for words quoted, see p 796.
- 8 Combined Methods, pp 3-29.
- 9 See a late paper of his 'Living Prehistory in India', Scientific American (February 1967), reprinted in: Combined Methods, pp 30-48.
- 10 'On a Marxist Approach to Indian Chronology' (1951) in Combined Methods, pp 49-56, and 'Stages in Indian History' (1954) in Combined Methods, pp 57-71. Since the latter article was published in ISCUS, the journal of Indo-Soviet Cultural Society, this was the first piece by Kosambi that I happened to read and remember being struck by its self-confident note.
- 11 Oriental Despotism A Comparative Study in Total Power, Yale University Press, 1957, p 329. Kosambi's own criticism of this work has been reprinted in Combined Methods, pp 797-801.
- 12 Introduction, pp 8-14.
- 13 Ibid, pp 10-11.
- 14 Ibid, p 11.
- 15 Ibid, pp 61, 255-56.
- 16 I select at random the following comment: "Among names common to several of our sources,

- that of Iksvaku (an obscure chief in RV, 10.60.4) occurs as founder of the Kosalan line of kings. The derivation is from iksu = sugar cane (first mention, AV, 1.34.5; also a kind of gourd), obviously totemic, presumably pre-Aryan" (p 118).
- 17 See, eg, pp 58-62, the context of the Indus Civilisation. Kosambi was writing just before Gramsci's concept of "hegemony" entered common use.
- 18 See pp 91-96.
- 19 See pp 96-101; quoted words on p 100.
- 20 See p 25.
- 21 See pp 25-34.
- 22 Combined Methods, p 59.
- 23 See Introduction, pp 326-28.
- 24 Ibid, p 275.
- 25 Ibid, pp 340-41.
- 26 Exasperating Essays: Exercise in the Dialectical Method, Poona, 1957, and Myth and Reality: Studies in the Formation of Indian Culture, Bombay, 1962.
- 27 Characteristically, Kosambi spoke in his Preface to this book of the tendency to talk "about India's glorious past, unhampered by fact or commonsense", while he disowned any intention on his own part to indulge in "scholarly display".

CENTRE FOR SOCIAL STUDIES, SURAT

Applications/nominations are invited for the post of **Director** of the Centre, an institution funded by the Indian Council of Social Science Research and the Government of Gujarat. An autonomous social science research institute of more than thirty-five years of standing, the CSS is involved in conducting studies on understanding of the development processes and uses such knowledge for interventions at different levels. An applicant/nominee should be a scholar of repute in any of the social sciences capable of providing academic leadership, and should be willing to conduct, direct and promote research on Gujarat and elsewhere in the country.

The candidate should preferably have some experience in the administration of academic/research organization(s) and willingness to interact with other similar institutions, development agencies and governments.

Appointment will be initially for a period of three years, but can be extended. The age of retirement is 62 years. Scale of pay: Rs.17300-450-20900-500-22400, plus allowances and perquisites according to the rules of the Centre.

Applications/nominations, with complete bio-data, should be addressed to the Chairman, Search Committee, Centre for Social Studies, Veer Narmad South Gujarat University, Udhna-Magdalla Road, Surat – 395 007, and reach him within one month from the date of publication of this advertisement. The committee will have the freedom to consider names of scholars who may not have applied or been nominated. Shortlisted scholars may be invited for a discussion during September, 2008.

Telephone: (0261) 2227173, 2227174, 2255298. Fax: 2223851

E-mail: info@css.ac.in
Website: www.css.ac.in

The Kosambi Effect: A Hermeneutic Turn That Shook Indian Historiography

RAJAN GURUKKAL

Kosambi was a scientist who talked about the past with the politics of intimacy with the present. This paper identifies the "Kosambi effect" and its various constituents. The most crucial constituent is the awareness that historical knowledge cannot be based on empirical givens and that a methodology guaranteeing a systematic, deductively formulated, and empirically verified concept of reality about the past is indispensable. The adaptation of historical materialism to serve the purpose, and accordingly writing a history worth designating a genre by itself in form, content and hermeneutics is another crucial constituent.

ndian historiography in the mid-1950s, when D D Kosambi turned to the field, was not all that weak, thanks to contributions of both foreign and indigenous scholars towards discovery and publication of sources as well as standardisation of the positivist craft of reconstructing history. However, limitations like preoccupation with dynasties and kings, their incomplete lists, obscure dates, eulogistic biographies and spiced tales of wars and conquests, extent of kingdoms and typology of administration, persisted ad nauseam. Books of James Mill and Vincent Smith were still inescapable master-narratives, even for those engaged in corrective efforts on them. Kosambi, a hard scientist, was impatient of the kind of soft knowledge that historians fabricated around India's past. He was, hence, looking for ways of charting the main currents of Indian history without losing the logic of science, although he never ever hoped to turn history into a science. His goal was to be scientific about the past, which hardly meant equation of science with non-science; it meant steadfast adherence to the logical relationship between premises and conclusions. Marxism was the answer he sought and it resulted in bringing a fundamental hermeneutic turn virtually questioning the meanings, measures and values hitherto accepted in contemporary Indian historiography. The present paper seeks to try and identify what can be called "the Kosambi effect" and figure out its constituents.

1 Adapted Marxist Methodology

It is well known that Kosambi's historical methodology was founded on Marxism. Exploring "scope and methods", the opening chapter of his book, he states: "The present approach implies a definite theory of history known as dialectical materialism, also called Marxism after its founder".2 In another context he reaffirms: "...the theoretical basis remains Marxist - as I understand the method."3 Historical materialism, "a definite theory of history", as he put it, was indeed his framework of comprehension and source of interpretation of historical societies. Accordingly he defined history as "the presentation, in chronological order of successive developments in the means and relations of production".4 He quotes a long passage from Marx's preface to Critique of Political Economy (1859), as an excellent statement of what he needed by way of a theoretical basis for characterising historical societies and their transformations. The famous passage begins as the following:

In the social production of their means of existence, men enter into definite, necessary relations which are independent of their will, productive relationships which correspond to a definite stage of

I am grateful to Kesavan Veluthat for his comments on the draft of this paper.

Rajan Gurukkal (rgurukkal@gmail.com) is currently visiting professor, Centre for Contemporary Studies, Indian Institute of Science, Bangalore.

Economic & Political weekly EEW JULY 26, 2008

development of their material productive forces. The aggregate of those productive relationships constitute the economic structure of the society, the real basis on which a juridical and political superstructure arises and to which definite forms of social consciousness correspond. The mode of production of the material means of existence conditions the whole process of social, political and intellectual life.

Though Kosambi quotes the entire paragraph from Marx's preface, what seems to have attracted him most is the portion reproduced above, as evident from the essence of Marxist historical perspective summarised elsewhere in his own words:

An aggregate of human beings constitutes a society when, and only when, the people are in some way related. The essential relation is not kinship, but much wider; namely, that developed through production and mutual exchange of commodities. The particular society is characterised by what it regards as necessary; who gathers or produces the things, by what implements; who lives of the production of others, and by what right, divine or legal – cults and laws are social by-products; who owns the tools, the land, sometimes the body and soul of the producer; who controls the disposal of the surplus, and regulates quantity and form of the supply. Society is held together by bonds of production.⁵

Kosambi understood Marx's class theory in the least literal sense as referring to the embedded dynamic of difference in the social form rather than a conflict manifesting itself in war. To quote him: "The proper study of history in a class society means analysis of the difference between the interests of the classes on top and of the rest of the people...." Obviously, what he has in mind is the contradictory dynamic of class differentiation carried forward to diverse aspects of social life.

It appears that Marx's primacy thesis about social transformation theorising the process of one mode of production dissolving into another, impelled under the dynamic of incompatibility between forces and relations of production, does not seem to have engaged Kosambi much. It is true that he talks about tools and implements as fundamental determinants in a social form. He says: "Social organisation cannot be more advanced than the instruments of production will allow..." However, the theoretical insights underlying the following sentence from Marx's preface to *Critique of Political Economy* do not seem to have prompted him to explain transformation:

A social system never perishes before all the productive forces have developed for which it is wide enough; and, new, higher productive forces never come into being before the material conditions for their existence have been brought to maturity within the womb of the old society itself.

Kosambi did think about forces of production central. He underlines the centrality of plough and discovers economic practices, ideas and institutions indicative of a transformed society in the course of critical analysis of ancient Indian literary texts, but hardly seeks to interpret change by problematising the incompatibility between forces and relations of production, which Marx emphasised the most.⁸

Like any other historian, what Kosambi wanted to adopt too was the direct procedure from historical records to history, but he was confronted by the question as to how history of India could be written in the absence of sufficient documentation. The texts and traditions of ancient India are not only different but also do not have social continuity of contacts with accuracy of

space and time. He says: "We are thus led inevitably to concentrate upon successive developments, in chronological order, in the means and relations of production. Only this can tell us how people lived at any period. The point of view here is, as in any other science worth the name, purely materialistic." 10

2 Anti-deterministic Stance

D D Kosambi's historical methodology does not let us just brand it as Marxist and be done with it. Historical materialism was indeed his framework for comprehending the past but his procedure was not exactly as construed in Marxism, the basic presumption of which meant formulation of theoretical truth first and checking it against the theoretically accessible empirical evidence. Kosambi often preferred to proceed the other way around, of course under the predicament of lack of direct sources. He says:

We shall at times have to reconstruct the material changes from what survives as marks upon the ideological superstructure, but let it be noted that Marxism is far from the economic determinism which its opponents so often take it to be. For that matter, any intelligent determinist must discuss 'conditions' rather than 'causes' and take full cognisance of the course of historical development.¹¹

Kosambi had little regard for theoretical empiricism that precluded hypothetico-deductive destined to deviate from the foundational theory, perhaps the central property that can be called the Kosambi effect. He says: "When one applies (Marxism) to the Indian problem, it must be kept in mind that Marx speaks of all mankind where we deal only with a fraction".¹²

Kosambi does not adhere to the teleological evolutionary schema through which Marx illustrated his theory unlike most Marxist historians who religiously do, often to the extent of even taking the illustration itself for theory.¹³ Though he has not defined it anywhere, it appears that he understood and practised Marx's theory exactly as construed by the structuralist Marxists who took it more as an instrument of analysis than a typology of social development. Kosambi observes "...no single mode prevailed uniformly over the whole country at any one time; so it is necessary to select for treatment that particular mode which, at any period, was the most vigorous, most likely to dominate production, and which inevitably spread over the greater part of the country, no matter how many of the older forms survived in outward appearance."14 However, he had accepted feudal mode of production with least botheration about its non-universal characteristics that historians subsequently debated at length in the Indian context.¹⁵ At the same time, he summarily rejected the concept of Asiatic Mode of Production (AMP) by dismissing Marx's remarks inapplicable to Indian history in the following words: "Acute and brilliant as these remarks are, they [Marx's words] remain misleading nevertheless".16

He makes clear that his position is far from mechanical materialism:

Economic determinism will not do. It is not inevitable, nor even true, that a given amount of wealth will lead to a given type of development. The complete historical process through which the social form has been reached is also of prime importance. ...If the superstructure cannot be adjusted during growth, then there is eventual conflict. Sometimes the old form is broken by a revolution in the guise of a reformation. Sometimes the class that gains by preserving the older

form wins, in which case there is stagnation, degeneracy or atrophy. The early maturity and peculiar helplessness of Indian society against later foreign invasions bears testimony to this general scheme.¹⁷

Kosambi's scathing review of S A Dange's "painfully disappointing book", *India from Primitive Communism to Slavery*, based on "facile pseudo-Marxism" shows the extent of his intolerance towards mechanical application of Marxism.¹⁸ However, Kosambi was never reluctant to ascribe universal generalisations to the particular context, even deterministically, so long as sources supported it, as the following statement exemplifies: "At every stage the survival of previous forms and the ideology of the top classes exert tremendous force – whether by tradition or revolt against tradition – upon any social movement." In short, what Kosambi made clear was that the adoption of Marx's thesis never meant blind repetition of all his conclusions (and even less, those of the official, party-line Marxists) at all times.²⁰

Kosambi was always an ideal analyst who produced the same results every time, and hence, quite scientific. Nevertheless, his views were hardly independent of himself. They were invariably mixed up with sense of justice and empathy, a feature quite sufficient for a scientist to see the approach unscientific. Perhaps, this duality is inevitable to any social scientists, for they make a different sense of "scientific/unscientific" as well as "objective/subjective". To be scientific for social scientists means to be truthful to and self-reflexive about their ways and means of knowing the social. The central reason is the epistemological distinction they make between the objects of knowledge of science and non-science. The objects of science are ontologically objective and those of social sciences, subjective. 21 Marxist concept of objectivity takes it out of the sphere of humanist perception and places it in the sphere of theoretical statements although many Marxists do the other way. Kosambi's historical methodology was more humanist than Marxist in the theoretical sense. He always insisted upon following a scientific investigation but his observations were objective in the social scientific sense, according to which objectivity resided in the openness and transparency of the evidence and analytical procedure as well as commitment to social justice. His observations seldom became objects of theoretical statements and they often deviated from the avowed theory as required by the nature of the source and probably under various influences including the pressure for rendering his arguments plausible to the sensibility of fellow-historians and readership. These account for the dominance of empiricist language over theory in his writings. It is a fact that they precluded the possibility of theoretical production, though marvellously transcended theoretical empiricism.

Kosambi has delineated a schema of the stages of social development in Indian history with unevenly evolved "tribal forms co-existing in varying concentration" as the long lasting background in time. ²² The question as to "how at various points these tribal forms were assimilated to the society" has been central to his identification of the developmental stages. The oldest progressive stage that he identifies in Indian history is that of the class-structured society whose surplus sustained the Indus cities. The next stage he makes out is that of the Aryan pastoral tribal

population with horse, mobile food-supply in cattle, and metal weapons, which overpowered the urban population and moved on to the east by clearing forests and assimilating lesser tribes by force and peaceful means. The subsequent stages are those of the rise of agriculture, trade, states, state-controlled agrarian villages and feudalism. There is no Marxism, deterministic or otherwise, in this schema of developmental stages, for it does not address itself the question of transformation from one stage to the other in the light of the theory of conflict between material productive forces and social productive relations. Nonetheless, it was indeed with Marxist insights he identified the advance of agrarian village economy over tribal country as the first social revolution in India, albeit without detailing the incompatibility between the forces and relations of production. Of course, he does state: "Nevertheless, just those social relations within the tribe that had made the first settlements possible had at this stage turned into fetters which had to be broken before society could advance to a higher level."23 But even when he turns towards changes in forces and relations of production, there is a top-down stare precluding theoretical focus on the process at the base.24 Obviously, the inadequacy of sources disallowed Kosambi to ask from which forms of development of productive forces what relations turned into their fetters where and when. Perhaps, it is not accidental that his definition of history emphasises changes in means and relations of production and not forces.

3 Fieldwork and Ethnography

While Kosambi's hermeneutics was based almost entirely on Marx's social theory and universals, his heuristics was based on ethnographic fieldwork and particulars. Field was his laboratory and ethnography of the present-day practices, his experiments. The importance he had given to fieldwork, his caution about ways of conducting it and the ingenuity he insisted are evident in the following words:

...fieldwork has to be performed with critical insight, taking nothing for granted, or on faith, but without the attitude of superiority, sentimental reformism, or spurious leadership which prevents most of us from learning anything except from bad textbooks... The paramount importance of fieldwork in the study of Indian history seems altogether to have escaped their [historians'] attention. Such works in the field falls into three inter-related classes: archaeology, anthropology and philology. All three need some preliminary knowledge of local conditions, the ability to master local dialects, and to gain the confidence of tribesmen as well as peasants. In all fieldwork it is necessary to develop a technique and critical method during the course of the investigation itself. Fitting observations into rigid, preconceived moulds is ruinous. The technique of asking the right question in the proper way cannot be taught nor mastered except in the field. Whatever transport is used to reach any given locality, the actual fieldwork can only be done on foot...there is no substitute for work in the field for the restoration of pre-literate history. This extends to all historical periods for any country like India where written sources are so meagre and defective while local variations are indescribably numerous...25

This methodological emphasis on field data for the study of history is not something common to historians, for their approach is normally confined diachronically to a specific period in the past presupposing a rupture with the present. Further, they seldom learn things from living objects; they derive their

knowledge out of dead relics in their archaeologically stratified contexts. Kosambi, on the other hand, stated:

Archaeology provided some data, but I could get a great deal from the peasants. Fieldwork in philology and social anthropology had to be combined with archaeology in the field as distinguished from the site archaeology of a 'dig'.²⁶

It is chiefly out of ethnographic survivals identified through careful observations that he sought to construct ancient socioeconomic processes. For instance, he argued that the change from an aggregate of gentes to a society, by relying on factors such as the endless ramifications of the extant caste system and the continuation of caste names, endogamy, commensal 'tabu', exogamous 'septs' (often with totemic names), and caste 'sabha' councils of tribal origin.²⁷ One thing that is exciting about Kosambi's fieldwork is his rare acumen to tracing survivals of the past in the present without losing the embedded evolutionary dynamic in the diachronic perception. It is an extremely difficult exercise with the lurking danger of being anachronistic any time unless the continuity is archaeologically and theoretically well-sustained.

4 Detection of Long Continuity

Kosambi was pretty sure that there existed a long continuity of past traditions in the folk present. He could theorise convincingly that change in ancient times was extremely slow and hence despite the distance in time, the past persisted in the present under certain historically contingent material conditions of human existence. Pre-history thus turned out to be a heritage of pre-class society to Kosambi. Archaeology of early tools and materials made a live sense to him more in the light of the current ethnography of tribal life with the notion of continuous acculturation. Likewise, the social anthropology of the rise of patriarchy, elaboration of ritual and sacrifice, and disposal of the dead, made sense to him in the perspective of sustained continuity. His analysis of the power of group-life and the interpretation of the descent of castes from tribes are based on ethnographic insights into continuity as well as change. We are shaken to open our eyes when he says: "The vast majority of country-side gods are still daubed with a red pigment that is a palpable substitute for longvanished blood sacrifices - which also survive in a few cases, although the very idea of blood sacrifices would now come as a shock to many devotees. One finds rites practised which clearly go back to the Stone Age, though the votaries - often people with a modern education - are not conscious of the incredibly long continuity."28 His first book, after discussing "scope and methods", goes straight into the heritage of pre-class society, focusing on tribal survivals by way of cults, festivals and rites.

Kosambi's "long continuity thesis" goes far beyond material artefacts, pursuing ancient ritual practices through a rigorous literary critical analysis of cultural texts. Continuity of culture is a rare trait that Kosambi ascribes to India on the basis of his superstructural analysis, seminal in the absence of historical records and feasible, thanks to the presence of ritual or religious texts in plenty. In response to allegations such as: "India was never a nation", "that Indian culture and civilisation is a by-product of foreign conquest", Kosambi argued that the continuity of Indian

culture in its own country is perhaps its most important feature unlike other continents of ancient civilisations.²⁹ He observes: "At every stage, in almost every part of the country, a great deal of the superstructure survived, along with the productive and formal mechanism of several previous stages; there always remained some people who could and did cling stubbornly to the older mode."³⁰ He discovers as "an extraordinary feature of the literary source, namely, that even the latest of the works may be the first to contain a very ancient tradition not recorded earlier, except sometimes by passing mention".³¹

Kosambi owed his method of linking the past with the present-day folk-life to his father who had used the method of reconstructing the past practices and their contexts out of village life.³² He was pretty sure of the long historical continuity of folk practices and the continuity had brought him great relief as a researcher of ancient history encountering acute dearth of source material. To quote his words: "Nevertheless, the country has one tremendous advantage that was not utilised till recently by the historian: the survival within different social layers of many forms that follow reconstruction of totally diverse earlier stages. To find these strata one has to move from the cities into the countryside."³³

5 Politics of Intimacy with the Present

Kosambi sought to study the past not out of antiquarian interest, but under pressures of socio-economic problems of the present. A praxis interventionist seeking resolutions to the problems of the present out of the past, he went about mastering history under the politics of intimacy with the present. Learning about the past was drawing oneself intimate to the present as far as he was concerned. It was learning about the present in the light of the past too. He was aware of and deeply committed to the political function of history, which meant facilitation of critical understanding of the past in relation to the present. Kosambi makes his function as a historian clear by quoting E H Carr:

The function of the historian is neither to love the past nor to emancipate himself from the past, but to master and understand it as the key to the understanding of the present. Great history is written precisely when the historian's vision of the past is illuminated by insight into problems of the present... To learn about the present in the light of the past also means to learn about the past in the light of the present. The function of history is to promote a profounder understanding of both past and present through the interrelation between them.³⁴

Kosambi's starting point of investigation into Indian history is critical consciousness about deeper socio-political and cultural conditions of the contemporary India. He begins identifying and characterising the Indian ruling class in the following way:

The class that rules India today, the paramount power, is the Indian bourgeoisie. This class has some peculiar characteristics, due primarily to the course of history. The Indian bourgeoisie is technically backward. Its production (and mentality) is overwhelmingly that of a petty bourgeoisie as yet... Its government has a unique position as by far the greatest power of capitalist assets, and a monopolist wherever it chooses to be. This seemingly absolute power is under compulsion of reconciling the real needs of the country, and its professed socialist goal, with the rapacity of both petty-bourgeois and tycoon sections of the ruling class. Finally, the class came to power too late, in a world

where the international bourgeois failure and crisis had already manifested itself.³⁵

The first chapter of Culture and Civilisation, 'The Historical Perspective' opens with characterisation of "the Indian scene" of unity and diversity, diversity as the cultural truth and unity as created by the modern ruling class consisting of the capitalist bourgeoisie, petty bourgeoisie, its politicians and bureaucrats and, the government as a single entrepreneur. Going into the historical composition of the Indian bourgeoisie and its multi-class origins, he observed: "A good deal of modern Indian Capital is, in fact, transformed primitive feudal and moneylender's accumulation... In recent times even India's feudal princes have had to (turn) their crude hoarded wealth into shares and stocks or sink into poverty... The feudal, moneylending, and trading families, especially their womenfolk never lost the outward forms of their religious superstition."36 Characterising the Indian villages he viewed: "...the dominant class in India and India's urban life bears the stamp of foreigners who imposed bourgeois mode of production - the countryside and religious institutions carry the indelible mark of their primitive origins because primitive modes of life have been and are still possible in many parts of the country".37 Discussing difficulties of the historian against such traits of the contemporary socio-political and cultural reality, he sets unique procedure.

Kosambi's context of doing history is not merely the bourgeoisie present theoretically abstracted, but done to the empirical details of everyday life, such as daily food requirements per Indian adult, in ounces. He grows impatient of official declarations stating that Indian food consumption continues to decline.

The grim tale of a diet so miserably deficient in every single particular is made still more tragic by the fact that it is a rare Indian who can afford to buy even the food assigned to him by the statistical averages. The question is, whether this situation of a populace doomed to hunger and disease is permanent, or whether Indian society is about to rid itself of such basic evils. How long can any country remain a democracy with this little sustenance for the average man? The answer has to be worked out by correct thinking, for which the study of history is quite indispensable. But the solution has then to be made a reality by correct action, which means a step beyond mere study of the past. Control over history is not to be attained by the passive suffering that has perpetuated Indian life from generation to generation. The time has now come to make history, to a seriously thought-out, conscious design in order to preserve the peace of Asian and of the world.³⁸

The intimacy that he purposefully maintained between the past and the present gives credence for his commitment to generating critical consciousness by linking specialised knowledge to politics, the most crucial service that the people need from a social scientist. This strong attitude to politics of knowledge showing clarity about and insistence upon the epistemological connection between the history one constructs and its relevance to the contemporary problems, makes the form and content of his history different, as the vital constituent of the Kosambi effect.

6 Primacy of Evidence

Absence of the usual Marxist teleological schema in Kosambi's Indian history can be understood in the light of his antideterministic stance. That there is no direct discussion of the changes in the means and relations of production, which is his definition of history, in his books is a feature of apparent surprise. We have already seen that the stages he identified in Indian history are not theoretically given but empirically endowed.³⁹ There is a discussion of the need for a radical change at the end of the chapter on Aryan expansion. But even that refers to intricacies of ritual as an unimpeachable testimony to the need for a more productive social organisation.40 The observation is that rituals reflected the underlying necessity - the shortage of food under the inadequate system of production. Analysing post-vedic rituals and rites, he identifies emergence of castes as indication of economic differentiation among tribes and class structuring within. He digs out from his sources the relics of institutions like mortgage, interest, usury and so on to characterise a changed society. However, nowhere does one come across in his writings a direct entry into the question of social form and its means and relations of production, despite the avowed methodological insistence upon the primacy of material processes.

Kosambi sought to discuss the cultural first, for the evidence existed there. It helped him reach out to the material basis of social existence by a reversal of the Marxist methodological strategy of proceeding from the base to the super structure with the theory of the homologous bearing of the former on the latter. For instance, he begins his discussion of the transformation from tribe to society by characterising the new priesthood, new religions, the mid-way approach of the Buddha, the dark hero of the Yadus, and the rise of Kosala and Magadha. Speaking about the new creeds and sects that emerged in the Gangetic region he comments:

In the study of these sects, the finer metaphysical differences are of lesser importance than the background phenomena of tribal life and the monstrous cancer growth of sacrificial ritual in the tribal kingdoms. It is out of these and as a protest against their anti-social features that every one of the sects appeared... The new society had gone over to agriculture, so that the slaughter of more and more animals at a growing number of sacrifices meant a much heavier drain upon producer and production.⁴¹

The following statements show how he related contents of cultural texts to the historical context of social change.

Truth, justice, non-stealing, not encroaching upon the possessions of others show that a totally new concept of private, individual property had arisen... The injunction against adultery denotes a rigid concept of family and the passing of group-marriage. Without such a morality taken for granted today, trade would have been impossible... The ahimsa doctrine first expressed the basic fact that agriculture can support at least 10 times the number of people per square mile than a pastoral economy in the same territory.⁴²

Likewise, he characterises political changes before examining the economic processes.

Kosambi carefully checks whether the absence of clues to theoretically valid hunches is accidental or natural. He always preferred to explain the absence and go by the evidence. One cannot see arbitrarily imposed theoretical extrapolation in his construction of the past. Absence of evidence for the existence of slavery in ancient India was not accidental for him but quite natural because, as he explains:

There was neither surplus nor enough commodity production for extensive slavery to be profitable. The territory was still thinly settled

93

over long distances in difficult country... There was plenty of room for retreat of the tribesmen as well as for expansion of plough-cultivation, in contrast to the limited useful terrain in Greece or Italy.⁴³

Therefore, he asserted: "...it is impossible to see slavery in the classical European sense in India at any period".⁴⁴

In chapter VII of his Indian History he himself says: "The last three chapters drift away from the definition of history given at the beginning of this work. The reader may be lost in the textcritical morass presented by tenuous legendary material uncollated with archaeology." It is only at the end of a long discussion of polity in five sections based on clues ferreted out from the jumble of literary texts he focuses on the class structure and state-controlled agrarian village as the basic production unit of the Mauryan economy supplemented by trade. The next chapter is about the post-Mauryan polity, superstitions of agrarian society, caste village and Manusmriti, change in religion, development of Sanskrit and its social functions, etc, – apparently topics never to have anything to do with changes in the means and relations of production. He could not find evidence for delineating the conditions of change in the means and relations of production leading towards the genesis of feudalism in India, exactly as the theory would have him extrapolate. Therefore, he preferred to go by what the palpable sources had him believe and characterise feudalism in India, a two-way processes from above and below respectively. 45 The first was a stage of state initiative from above in the form of land-grants. He defined feudalism from above "as a state wherein an emperor or powerful king levied tribute from subordinates who still ruled in the right and did what they liked within their own territory – as long as they paid the paramount".46 The next was a stage of landed intermediary developing within the village, between the state and the peasantry, gradually to wield armed power over the local population.⁴⁷ According to him feudal developments were inevitable with the growth of small kingdoms over plough-using villages.48

Kosambi explains probably this contradiction by saying: "Unfortunately, none of these fasts can be elicited without tedious discussion of badly analysed sources. The reader who is dissatisfied with my treatment has only to compare it to any other standard discussion based upon documentation rather than pure conjecture. The most that could be expected here is a sketch of the possibilities for further work." His question is what one would do if the sources to be depended upon for discussing economic transition from pastoral to agrarian are mostly later ritual legend, myth, fable or sermons. According to him many of them have been readjusted by the priestly class which had begun to grow further and further away from the producers, rewriting tradition to prove their own importance or to claim special caste/class privileges. 50

Kosambi states: "A change of the utmost historical importance is in the relation of the ideological superstructure to the productive basis; what had been an indispensable stimulus at the beginning became a complete hindrance by absolute stagnation at the end."51 His argument is that the tribal society could not have been converted peacefully to new forms and free savages changed into helpless serfs without the ideological superstructure replete with superstitions such as worship of the cow, cobra, and monkey.

Such theoretical arguments apart, he let the evidence go first and theory to follow. Kosambi did not do theory through history. Theory dissolves and disappears into the history that he writes. Advancing from the superstructure through culture to property relations and economic base was his methodological procedure, which involved rigorous text-critical analysis in search of evidence, a feature of high level technical competence that saved his arguments from being easily branded as Marxist reductionism.

7 Sources First

Kosambi's top priority was sources, a quality that he inherited from his father. There was a marked difference in Kosambi's purpose and mode of dependence on sources, particularly literary texts that historians had searched for annals and dynastic accounts. He believed: "So far as annals, king-lists, chronicles, dates of important battles, biographies of rulers and cultural figures go, there is no Indian history worth reading".52 Therefore, his approach to sources, especially literary texts, was analytical and multidisciplinary, which he called "combined methods in Indology", putting linguistics, archaeology, anthropology and sociology together in the perspective of the materialistic social theory of history.⁵³ He goes deep into the structure, composition and social context of every text with enormous insights into their constitution. The study of Mahàbhàrata generally and Gita particularly exemplify the thoroughness of the texts with which he proceeded to interpretations implying significant hermeneutic departures in Indian historiography.⁵⁴ His critical literary analysis, genealogy of myths, archaeological corroboration, etymology of terms, their social anthropological implications such as tabu and totemic importance and so on running in several pages ingrain indications of the pattern of land-use, the presence of plough, the producers, surplus, trade, social groups and relations of appropriation. All this is done not by presenting evidence from texts full of legends and myths, the rationalisation and pursuance of the tantalising contents of which, he knew, would rarely yield direct historical information.55 His use of source was indirect in the sense that he relied on the analytically accessed historical signifiers in it, which in turn could be produced as evidence theoretically.

His critical literary analysis of the available sources was thorough, contextualisation unique and the mastery, amazingly profound, as his reviews, articles and books testify.⁵⁶ It was a tedious process of critically knowing the internalities and externalities of the texts, which can be illustrated with the help of a few sample quotes from him: "The Rigveda was put together from clan books combined with certain additions, and then transmitted to us

Economic&Politicalweekly

Unbound Back Volumes of *Economic and Political Weekly* from 1976 to 2007 are available.

Write to: Circulation Department,

Economic and Political Weekly

320-321, A to Z Industrial Estate, Ganpatrao Kadam Marg, Lower Parel, Mumbai 400 013. Email: circulation@epw.in

Sakala recension which was generally accepted.... Sàmaveda may be discarded immediately, for its words are almost entirely from the Rigveda with trifling adjustments for the purpose of musical chanting at the fire-sacrifice".57 Then he goes into the several recensions of the Yajurveda and takes the Taittirayasamhita of the Black 'Yajus' and the Satapathabràhmana portion of the Vàjasneyisamhita of the White Yajus as the most useful texts. In preserving the Yajurveda, several other widely separated tribal groups participated. Names like 'Kañha' connected with the tradition are confirmed by Greek sources as Indian tribal names at the time of Alexander. The 'Taittiraya' is only one such recension..."58 "The name of the Taittirayasamhita, derives from 'taittiri, patrodge gotra totem', all the more interesting because the book itself tells us that one of the heads struck off from threeheaded 'Tvaùñç' by Indra became a taittiri bird. The taittiri country produced fine horses according to Mahàbhàrata."

The Atharvaveda is the late text. He finds the two epics, Ramayana and Mahabharata very difficult to fit anywhere into the closed sequence forming the next group of sources. Finally, there exists the Buddhist canonical literature in the simpler Pàli language, which was first written down in Bihar about the time of Asoka, say about two and a half centuries after the events narrated, and about which grew up a whole series of tales in the nature of commentaries, the Jàtakas being the most informative. He says that Pàli literature brings us into verifiable history, for archaeology supports the record. He thinks that the Jain sutras must be included therewith though in their present state they are later as well as less important. Kosambi delves into the complex sources with his profound multidisciplinary scholarship and amazing competence in linguistics and comparative literature to see what could be historical about them and does archaeology support their historicity.

There is always a detailed examination of sources at each stage with exhaustive critical comments on what to be used, why and how in the light of what were composed when. For instance, speaking about the Buddhist literature, he would note: "...Jàta-kas cannot be utilised directly for a picture of social relations at the time of the Buddha. The reason is that they were written much later, in a traders' environment – perhaps, during the Sata-vahana period. They have in addition been influenced by the lost Ceylonese versions of Buddhist stories from which the present text was again reduced to Pàli. The Buddhist canon was mostly formed about the time of Asoka, a part even later. Only the fact that society and its means of production changed slowly, that there was no special reason to invent the particular details cited, allows parts of the canon to be used as evidence for conditions at the time of the Buddha's death."59

The multidisciplinary insights and comparative cultural wisdom with which he handled the sources can be exemplified by a couple of his reflections on the flood incarnations: "The tortoise is of totemic importance, as it has to be built into the sacrificial altar though not a sacrificial animal. It is etymologically related to the Kasyapa 'gotra' of the brahmins, which is notorious for being able from early days to absorb (as the name Màtanga Kassapa shows) aborigines who wanted to become brahmins and as the gotra of all those without a clan name or unable to

remember their clan name or born of mating against exogamic gotra rules. Kasyapas were negligible in the Rigveda, of growing importance in the traditions above while they took the lead in the early Kosala-Magadhan Buddhist order. The tortoise is specifically included in the list of five nailed animals which may be eaten without breaking a tabu. This shows that it was eaten by brahmins apparently for totemic rights since it is nowhere prescribed as an article of diet nor known to have been specially popular as staple or delicacy. The fish incarnation goes back to Sumeria, perhaps through the Indus culture; the goat fish is a symbol of Ea who is also 'Enki' and sleeps in a chamber within the waters just as Vishnunàràyaõa sleeps upon them. The very name Nàràyaõa may be of non-Aryan derivation, for Nara is explained as the waters. The word is probably borrowed by Sanskrit and may be Dravidian, or even Assyrian."

8 After Words

A scientist who talked about the past with the politics of intimacy with the present, Kosambi remained an intimidating scholar for his contemporaries (for that matter he still does so even for scholars today), to take issue with him, thanks to what can be epitomised as "the Kosambi effect", the most crucial constituent of which is the awareness that historical knowledge cannot be based on empirical givens and that a methodology guaranteeing a systematic, deductively formulated, empirically verified concept of reality about the past is indispensable. The adaptation of historical materialism to serve the purpose, and accordingly writing a history worth designating a genre by itself in form, content and hermeneutics is another crucial constituent. The authority and authenticity with which he wrote his strong prose of political determination based on a commendable grasp of classical world history, profound knowledge in Sanskrit and Pali texts, scholarship in several foreign languages, intellectual honesty with sources, extensive fieldwork, ethnographic wisdom, familiarity with cognate disciplines such as archaeology, anthropology, economics and sociology, and technical competence in epigraphy and numismatics, are other constituents. Naturally, scholars seldom braved a cognitive encounter with his conclusions. They never dared to dismissively brand them Marxist either, since he himself was a ruthless critic of contemporary Marxist arguments. He has noted once that his conclusions "...had a mixed reception because of the reference to Marx, which automatically classifies them as dangerous political agitation in the eyes of many, while official Marxists look with suspicion upon the work of an outsider."61 Kosambi, distinguished from the positivist, reconstructionist mainstream with empiricism as the central methodology for discovering reality, was a Marxist constructionist inclined to proposing conditions of historical happenings, rather than discovering their causes. He knew that the knowledge about the past in terms of specific details will always remain tentative leaving historians' representations unending since real past never exists out there for verification. Nevertheless, the version with "the Kosambi effect" will last long, for it ingrains the ultimate realisation expressed in his own words echoing Marx's philosophical position: "It is doubtless more important to change history than to write it...".62

Economic & Political weekly EPW JULY 26, 2008 95

- 1 Interestingly, Kosambi arrived in Indology gently addressing Marxists and later thundering at them by putting across his views in a few provocative reviews and assertive responses. An example of the gentle tone is 'Caste and Class in India', Science and Society, Vol III, No 3. New York, 1944, pp 243-49. A typical example of thundering is the review of S A Dange's book, India from Primitive Communism to Slavery, D D Kosambi, 'Marxism and Ancient Indian Culture' in Annals of the Bhandarkar Oriental Research Institute, Vol XXIX, No 4, Poona, 1948, pp 271-77. Also see 'On a Marxist Approach to Indian Chronology' in Annals of the Bhandarkar Oriental Research Institute, Vol XXXI, No 4, Poona, 1950, pp 258-66, wherein he makes critical responses to D A Suleikin's note on the periodisation of Indian history. But his book appeared strikingly quite unassuming and humble. The preface to the first edition of the book says: "This book does not pretend to be a history of India. It is merely a modern approach to the study of Indian history, written in the hope that readers may be impelled to study that history for themselves, or at least be enabled to look at the country with greater sympathy and understanding".
- 2 See, D D Kosambi, An Introduction to the Study of Indian History, Bombay, 1956, pp 8-9.
- 3 Ibid, p 12.
- 4 First he defined history as "...the development in chronological order of basic changes in the means and relation of production" in the review of the three volumes: The History and Culture of the Indian People, Vol I, The Vedic Age, London, 1951; Vol II, The Age of Imperial Unity, Bombay, 1951 and Vol III, The Classical Age, Bombay, 1954. See D D Kosambi, 'What Constitutes Indian History?' in Annals of the Bhandarkar Oriental Research Institute, Vol XXXV, Poona, 1954-55, p 197. Subsequently, he gives the definition in a slightly modified form in the opening chapter of his An Introduction to the Study of Indian History, op cit, p 1 and later repeats it but replacing "development" by "change" in the first chapter of his Culture and Civilisation, op cit, p 10.
- 5 See An Introduction to the Study of Indian History, op cit, pp xii-xiii.
- 6 Ibid, p xii.
- Ibid, p 6.
- Kosambi says: "...it is more important to know whether a given people had the plough or not than to know the name of their king, then India has a history..." See his Culture and Civilisation... op cit, p 10. For details regarding 'the primacy thesis' see, G A Cohen, Karl Marx's Theory of History: A Defence, Oxford University Press, London, 1978, pp 157 ff. Also see the discussion in E O Wright, A Levine and E Sober, Reconstructing Marxism: Essays on Explanation and the Theory of History, London, 1992, pp 19 ff.
- See his An Introduction to the Study of Indian History, op cit, p 4 ff.
- 10 Ibid, p 6.
- Ibid, p 10.
- 12 Ibid. p.o.
- 13 His commentators, a few in all, have noted this. See the introduction to R S Sharma and V Jha (eds), Indian Society: Historical Probings, New Delhi, 1974. The best appraisal ever made is seen in Romila Thapar, 'The Contribution of D D Kosambi to Indology', Interpreting Early India, New Delhi, 1993, pp 89-113. D N Jha's review of Kosambi's Culture and Civilisation, op cit, 'A Marxist View of Indian History' in Economy and Society in Early India, Issues and Paradigms, Delhi, 1993. Also see Introduction in B D Chattopadhyaya (ed), Combined Methods in Indology and Other Essays, New Delhi, 2005, pp 5-14.
- 14 D D Kosambi, An Inroduction to the Study of Indian History, op cit, p 14.
- To Marx it was a hierarchical system of landownership with serf labour chained to it. See excerpts in Bottomore and Rubel (eds), Karl Marx, Penguin,

- reprint, 1979, pp 120-30. The ruling class structure is taken fundamental in Coulborn (ed), Feudalism in History, Princeton 1956, p 4. It was a closed estate economy to Henry Pyrenne, Economic and Social History of Meieval Europe, London, 1958, p 7 ff. Seignorial and serf elements are emphasised in certain studies. See P Anderson, Lineages of Absolutist State, London, 1977, p 408. Moris Dobb, Capitalism, Development and Planning, New York, reprint, 1970, pp 2-3. R H Hiltion, Peasants, Knights and Heretics, Cambridge, 1976, p 4. Spread of service tenements and the rise of a class of full time warriors are considered central in March Bloch, Feudal Society, London, reprint 1975, Vol I, p xiv, R S Sharma, 'How Feudal Was Indian Feudalism?', Social Scientist, No 129, 1984, pp 16 ff. For the debates, see The Journal of Peasant Studies, special issue edited by T J Byres and Harbans Mukhia, Vol 12, Nos 2 and 3 (1985).
- See, An Introduction to the Study of Indian History, op cit, ibid, p 11. Also see his 'Stages in Indian History' in B D Chattopadhyaya (ed), D D Kosambi, op cit, p 35.
- See, Culture and Civilisation of Ancient India, op cit, p 12.
- He remarked that the book "...would not have been worth reviewing, but for the fact that to let such a performance go unchallenged would bring Marxism into disrepute", D D Kosambi, 'Marxism and Ancient Indian Culture', op cit, pp 271-77.
- See, Culture and Civilisation.... op cit, p 12.
- See, An Introduction to the Study of Indian History, op cit, p 10.
- For a detailed discussion of the epistemology and knowledge characteristics of physical sciences, see John P Van Gigch, 'Comparing the Epistemologies of Scientific Disciplines in Two Distinct Domains: Modern Physics versus Social Sciences' in Systems Research and Behavioural Science, Syst Res 19, 2002, pp 199-209. Also see, part II of the same article in ibid, pp 551-562 for epistemology and knowledge characteristics of "new" social sciences.
- For a detailed consideration of the trajectory see his 'Stages of Indian History', reproduced in B D Chattopadhyaya (ed), D D Kosambi, op cit, pp 34-36.
- See, An Introduction to the Study of Indian History, op cit, p 144.
- 24 Idem. For instance, his next sentence is: "The necessary steps towards a remarkable new type of society were taken...". Maybe quite inadvertent, the language is that of the view from above and agency oriented.
- See, An Introduction to the Study of Indian History, op cit, p ix.
- See, extracts from D D Kosambi, 'Adventures into the Unknown' in K S Murthy and K R Rao (eds), Current Trends in Indian Philosophy, Bombay, 1972, pp 152-67 compiled as "Kosambi on his Philosophy" in the form of the introduction of A J Syed (ed), D D Kosambi on History and Society: Problems of Interpretation, University of Bombay, 1985, p viii.
- 27 See, D D Kosambi, 'The Basis of Ancient Indian History' in Journal of the American Oriental Society, Vol LXXV, Nos 1 and 4, US, 1955, p 256.
- An Introduction to the Study of Indian History, op cit, p 8. Also see 'Living Pre-history in India' in Scientific American, February, 1967, reproduced in B D Chattopadhyaya (ed), D D Kosambi: Combined Methods in Indology and Other Writings, New Delhi, 2002.
- 29 See, Culture and Civilisation ..., op cit, p 9.
- 30 Ibid, p 23.
- 31 Ibid, pp 117-18.
- This observation has been first made in Romila Thapar's study, 'The Contribution of D D Kosambi..' in Interpreting Early India, op cit, p 91.
- See Culture and Civilisation, op cit, pp 13.
- For details see, E H Carr, What Is History, London, 1962, 20, 31, 62.
- 35 See, Preface to the first edition of An Introduction

- to the Study of Indian History, op cit, p xiii. He says that an "eleventh chapter commenting on these points and their probable effect on future historical developments had reluctantly to be deleted". Probably this he could not include even after 10 years when he published his Culture and Civilisation... op cit. May be, he thought the context of crisis unimportant.
- See, Culture and Civilisation, op cit, pp 7, 16-17.
- 37 Ibid, pp 16-24.
 - See, An Introduction to the Study of Indian History, op cit, p 14. It is appropriate to recall here the fact that this book is dedicated to Indo-Soviet friendship. The dedication in his edition of Bhartrhari's Satakatrayam is equally relevant: "nåtana mànava smàjasya purascaràõàm Marx, Engels, Lenin nàmadhiyanàm tijasvinàm mahàmànavanàm punãtasmaraõàrtham".
- See, D D Kosambi, 'Stages in Indian History', compiled in B D Chattopadhyaya (ed), D D Kosambi... op cit, pp 34-38.
- See, An Introduction to the Study of Indian History, op cit, p 166.
- Ibid, p 166.
- Idem. 42
- 43 Ibid, p 149.
- 44 Idem.
- 45 Ibid, p 295 ff.
- 46 Ibid, p 295,
- 47 Idem.
- 48 Ibid, p 296. 49 Ibid, p 111.
- 50 Ibid, p 115.
- See, D D Kosambi, 'The Basis of Ancient Indian History' in A J Sayed (ed), D D Kosmabi, op cit,
- See D D Kosambi, Culture and Civilisation of Ancient India in Historical Outline, 4th Imp, New Delhi, 1976, p 23.
- See, D D Kosambi, 'Combined Methods in Indology', Indo-Iranian Journal, Vol VI, 1962-63, pp 177-202 reprinted in A J Syed (ed), D D Kosambi on ... op cit, pp 1-25.
- See, his articles, 'Working Class in the Amarakosa' in Journal of the Oriental Research, Madras, 1961, pp 57-69; 'The Historical Development of the Bhagavad Gita' in Enquiry, Vol II, Delhi, 1959, pp 1-20; 'The Autochthonous Element in the Mahabharata' in Journal of the American Oriental Society, Vol LXXXIV, 1964, pp 31-44. The whole essays of his book, Myth and Reality, Bombay, 1962 vouch for his rare erudition and hermeneutic faculty.
- Ibid, p xv.
- All his reviews are noteworthy for the feature, but the review of K A Antonova's Russian book on feudalism in India is exceptionally so, see D D Kosambi, 'On the Development of Feudalism in India' in Annals of the Bhandarkar Oriental Research Institute, Vol XXXVI, parts III and IV, Poona, 1956, pp 57-69.
- See, An Introduction to the Study of Indian History, op cit, p 116.
- Ibid, p 119.
- 59 Ibid, p 147.
- 60 Ibid, p 118.
- See the introduction of A J Syed (ed), D D Kosambi on History and Society: Problems of Interpretation, op cit, p viii.
- 62 See, Preface to Culture and Civilisation, op cit,

Economic&PoliticalWEEKLY

available at

Sandesh Agency

658 Narayan Peth Appa Bhavan Chowk, Pune 411 030 Ph: 66021340

D D Kosambi and the Study of Early Indian Coins

B D CHATTOPADHYAYA

This article sets out to explain what drove D D Kosambi to take up the study of early Indian coins. Kosambi's research in numismatics beginning in the 1940s marked a radical departure in the field from the practices and interests in the previous 100 years. There can be questions about how historians, including Kosambi, may have used coins as markers of socio-economic change. But Kosambi's use of numismatics was such that historians can no longer ignore numismatic evidence for societal history. It was inevitable that some of the major findings of Kosambi would not stand the test of time. But the need to revisit his findings only demonstrates the value of his pioneering perspectives: we need to think differently and prepare a new agenda for examining material from the past – if necessary by turning current perspectives upside down.

D Kosambi's explorations into the study of early Indian coins, which seem to relate only marginally to his otherwise extensive work on Indian history, society and culture, represent his early attempts to gain familiarity and experiment with a substantial body of early Indian material remains. In explaining the beginnings of his experimental work with early Indian coins Kosambi mentions that he took up two initial problems "to teach myself statistics": one was an analysis of the examination marks of first year college students, and the second — "a more fruitful problem" — was a quantitative analysis of early punchmarked coins. Kosambi's initial finding was that

the apparently crude bits of "shroff-marked" silver were coins as carefully weighed as modern machine-minted rupees. The effect of circulation on any metal currency is obviously to decrease the average weight in proportion to the time and to increase the variation in weight. The theory of this "homogeneous random process" is well known, but its applications need careful work on whole groups of coins [Kosambi 1986].

This statement about how he initially became interested in the study of early Indian punch-marked coins separates Kosambi from those who are drawn to numismatic studies deriving from Indological or antiquarian interests. This also does not mean that he was in any way unaware of the historiography of such studies, but the distinction may explain how his concerns and the way he sought answers to his queries was a complete departure from the tradition of numismatic studies, as it had been evolving for over a 100 years before his time. This short paper is an attempt to understand his concerns: What it cannot attempt is to explain the technique and logic of his numismatic statistics. It should be left to statisticians to explain the method and applicability of his statistics, a task to which they have not addressed themselves so far.

Numismatic Methodology

To appreciate properly where Kosambi took a different path calls for a brief statement on numismatic methodology in India in general. The beginning of colonial interest in Indian past, and the institutionalisation of this interest in different forms, had led to a steady accumulation of a wide variety of remains from the past: Manuscripts, objects of art, inscriptions, coins, stone tools and so on. The initial task was to classify them in chronological or some other order, and edit them, where necessary, for publication. The procedures and methodology of coin study were no different. Coins were collected (although many found were melted, haphazardly distributed or auctioned even by officials, or found their ways into the oblivion of private collections) as stray or accidental finds sometimes in the form of either small or large hoards, and sometimes during archaeological excavations, though generally not in large quantity.

B D Chattopadhyaya (bdchattopadhyaya@gmail.com) retired from the Centre for Historical Studies, Jawaharlal Nehru University, New Delhi.

Arranged chronologically into different groups or series, mostly on the basis of "legends" or writings on them, the descriptive methodology of coins, listed group-wise or variants within the group, picked on mainly the following variables: The weight of individual pieces, metal, description of the obverse and reverse symbols, including readings of legends, where they appear, and a few other details. When coins were uninscribed, as the punchmarked coins studied by Kosambi were, meticulous documentation of their symbols, weights and variations would form the basis of classification. The documentation, as Kosambi's trenchant criticisms running through his essays repeatedly point out, was not always impeccable, but the above would roughly characterise numismatic studies, from early standard works of A Cunningham (1891) or EJ Rapson (1898) to the preparation of systematic museum coin catalogues by V A Smith (1906), E J Rapson (1908), John Allan (1936) and others and of detailed coin hoard studies by Indian scholars like A S Altekar (1927), P L Gupta (1963) and others.

General problems deriving from descriptive studies centred around metrology or weight standards and their different denominations, comparing textual references with weights of actual specimens, the relationship between areas of distribution and political control, and the tricky question of the origin of coinage in India. Texts, considered a major source for coinage study, came in for a detailed analysis for providing vital clues in these matters. Considerations on the economic significance of coins when discussions on the theme were undertaken - tended to accept the simplistic generalisation that a substantial volume of coins or currency of high-value coins in gold and silver would suggest economic and commercial prosperity for the country; a deviation from it would suggest economic decline. An additional theme which received considerable attention from numismatists was the significance of symbols which figured on coins; in particular, the various combinations in which symbols appeared on India's earliest coins – the uninscribed punch-marked coins – offered a puzzle evoking varieties of solution.

1

These were not themes which initially motivated Kosambi to study the ancient metallic specimens. As it has been pointed out in the beginning, it was the possibility of using the coins as samples in his experimental statistical work that drew him to them. It is true that some of the queries arising out of his work were those of coinage experts too, but he would not, even in a somewhat changed scenario of numismatic study in terms of historical archaeology, handle the problems the way they did.

The second aspect in which his work differed from that of coin specialists was in the choice of his samples. A numismatist examines all varieties of coins from the point of view of variables chosen by him: a single coin, a highly corroded specimen of which the present weight may be at considerable variance with its original weight, or a coin series of which only a few specimens are available. What Kosambi, on the other hand, required was a substantial body of specimens, and, further:

The coins must have been cut with sufficient accuracy at the beginning so that their initial variation is not much greater than the changes caused by circulation. This excludes copper, pewter, and even billon

coins of the ancient period...Again, the circulation must be regular enough to have the proper effect, which excludes gold coins in general, almost always hoarded with the minimum handling, but liable also to be clipped or, in India, rubbed on the touch stone. Finally, the groups must have sufficiently large members with comparable history, i e, should be members of the same hoard [Kosambi 1956: 164].

All these preconditions stated in clear terms much later must have been in Kosambi's mind when he set out to make a statistical study of early coins; they explain why he chose specimens from fairly large-sized hoards and why he took up only the "punchmarked" series of coins, issued mostly in silver with satisfactory conformity to an ascertainable weight standard and found in a fairly good state of preservation. His basic work on coins was published between 1940 and 1952; the later publications or publications referring to his own generalisations on coins were based on his findings during this period. Since, given all the preconditions set for his work, he chose to work only on punch-marked coins, found only in hoards, it may be in order to make a few comments on the nature of these coins. Possibly closely associated with earlier crude silver pieces, also sometimes found together in hoards, punch-marked coins derived their name from the way they were prepared: they were sheets of silver, cut to a standard required weight (corresponding to the present 'raktika' or 'rati' standard) and were hammered or punched with a regular group (usually five) of symbols on one side. The other side generally remained blank, but where tiny marks appeared on the reverse, their number, as Kosambi attempted to bring out their significance in relation to their circulation history, could range from one to 20 or more. As punch-marked coins represented, after they came into circulation, the most extensively manufactured and used coins in all parts of the country in early times, there were significant variations in the use of symbols and weights, and being in circulation for a long span of time (and therefore called 'purana' or old), along with other series more local in character, they went through certain significant stages of evolution.

Preliminary Study

However, all this knowledge emerged only gradually and would not have been the central concern of Kosambi's work. What concerned him, and the methodology of his approach, are both present even in his preliminary study based on two hoards of coins, both found at the Bhir mound in Taxila (near Islamabad in Pakistan) and published in detail by EHC Walsh [Memoirs 1939], with several inaccuracies and inconsistencies uncovered by Kosambi. For the larger hoard of heterogeneous series of coins, assigned to a date earlier than the other, Kosambi selected 1,059 punch-marked coins, divided into square-shaped, and roundshaped groups, and arranged them further into 10 groups, this time the grouping being done on the basis of the number of reverse marks on them. It is true, Kosambi admitted, that the number of reverse of marks in some cases could be as many as 16, but on the few specimens that the symbols appear, it was difficult to count them properly and, in any case, these specimens would not have made any significant difference to his statistical generalisation. Perhaps the simple arrangement can be best represented by reproducing a sample table that he prepared [Kosambi 1984:2]:

		ХО	1	2	3	4	5
Square	n	224	128	132	85	64	46
	m	53.26	52.93	52.74	52.47	52.53	52.17
Round	n	58	34	29	28	25	10
	m	58.35	52.84	52.75	51.90	52.29	51.67
			6	7	8	9	10
Square	n		21	25	10	9	8
	m		52.03	51.67	51.40	51.47	51.01
Round	n		13	8	9	3	3
	m		51.82	52.23	51.23	50.10	51.20

.....n is the number of coins with the number x of reverse marks given at the column head, and m the average weight in grains.

From this Kosambi immediately came to highlight what appeared to emerge as the most important point: "there is a regular drop in average weight with increase in the number of reverse marks". That the reverse marks - irregular as they may appear were of a major significance in the study of the circulation of punch-marked coins was the first point that Kosambi established through his simple method, buttressed by statistical tests. The correlation between weight loss and increase in the number of reverse marks, however, by itself did not explain either the presence of reverse marks or variation in their number. So, even at this initial stage of his work he offered what he considered the only plausible hypothesis: "The only hypothesis that can account for our results is that the reverse marks are checking marks stamped on by contemporary regulations or controllers of currency, at regular intervals" (emphasis in original). He advanced also some firm suggestions regarding the significance of the regular group of five symbols figuring on the obverse, with of course considerable variations in them: in doing so he admitted the tentativeness of what he was suggesting: "... I review the usual discussion of the symbols on the coins, and add my own pennyworth to the existing welter of conjecture", and further (ibid: 15), "This is conjecture, not statistics, but after all a working hypothesis can always be produced, to be modified by newer evidence." Reference to his reconstruction on the basis of this hypothesis would be briefly made again later.

Weight Variation

The calculation of weight variation between coins followed from an initial appreciation of the fact that no two coins, even though freshly minted and with modern technology, are of identical weight. As in several other cases, in initial variation as the starting point, Kosambi got more than 200 freshly minted coins tested at Bombay mint, and comparing the scale of variation with evidence from the older Taxila hoard (ibid: 66), came to the conclusion that "the ancients did a pretty good job of this coinage" in a normal period, the variation being wide in a period of abnormal minting. Another example of comparison with current coins was when a sample of 3,000 rupee coins was taken out of circulation to test how "coinage weight" would decrease with increasing length of circulation. It was found that it did "with about the same regularity" as with the square group of coins of the older Taxila hoard.

To reiterate briefly as a layman reader, Kosambi's analysis involved various stages. One was identifying different series present in a hoard deposit and trying to demarcate them in terms of their distinguishing features and of the chronology of minting. For example, the older Taxila hoard consisted of six groups, apart from two coins of Alexander, one of his half-brother Philip Arrhidaios, and one Daric of pre-Alexandrian Persian Achaemenid empire, the cumulative evidence suggesting that the hoard may have been buried around 320 BC. The second stage of course would be accurate recording of the weights of all coins; re-weighing coins discovered years back may be an impossibility unless they are all in an organised and accessible collection. The third would be selecting the coins for carrying out the particular tests since tests were not undertaken on all groups present in the hoard, although found together and circulating alongside the selected group, they too would provide some idea of the nature of circulation.

All these point to Kosambi's insistence on making the initial documentation as comprehensive as possible and recording observations on relevant aspects of the find. For example, simultaneously with concrete details of how coins can be cleaned,¹ one finds him also ridiculing the idea that some naive suggestions could be instantly made by numismatists on the condition of the coins immediately upon discovery. Centuries of burial in damp soil draw up the copper alloy of silver coins to the surface "leaving spongy silver behind". Instead of understanding this process of "decuprification", numismatists were making "the technically impossible supposition that molten copper had been poured on to the silver coin to bring up the weight" [Kosambi 1956: 165]. Equally impeccable needed to be the recording of stratigraphic and spatial context:

Something could be done with a chart of findspots, but not in the accepted dilettantish manner. If the findspots are accurately marked with groups, and the *numbers* counted instead of just the occurrence of single coin of the type, we would make better conjectures..... For this, however, will be needed not only better grouping of information but also far more information from new excavations and more thoroughgoing surface collections......it would have been of value to know the stratification of the coins of the older Taxila hoard (Kosambi 1984, 'Scientific Numismatics', pp 43-44).

These observations proceeded from Kosambi's focus on two Taxila hoards which remained the constant reference points of his writings, and it is from this technical perspective that he examined afresh the reports on other finds of punch-marked coins for comparative analysis and commented on the particular inadequacies in their documentation. He also physically examined the coins of Bodenayakkanur hoard of Tamil Nadu. The reports reassessed by him were of Paila hoard of Uttar Pradesh (ibid, Essay No 10), Purnea hoard of north Bihar, east Khandesh hoard of Maharashtra (ibid, Essay No 7) and so on. The re-examinations helped him further to attribute the coins to specific regions, identify their special attributes and comment on the chronology of their circulation. For example, the Paila hoard was found in what could be considered the ancient 'janapada' of Kosala. Two features of the coins are distinct: the obverse symbols number 4 and the average weight of the coins would be two-thirds of that of the coins of other Taxila hoard. Since Kosala was incorporated within an expanding Magadhan kingdom by the 5th century BC,

Economic & Political weekly EPW JULY 26, 2008

the Kosala janapada coinage may be dated prior to it. In the case of the Bodenayakkanur hoard, a proper cleaning and weighing of the coins suggested the presence of two groups (leaving out a group of few unstamped pieces): the single piece of the first group being of the early Mauryan period, the larger group being found attributable to late "Mauryan" kings or rather were later local imitations. The suggested period of circulation is 400 years or more; the implication is that they were in simultaneous use with other series, for reasons of intrinsic value and weight, irrespective of area or date of issue.

While precise documentation by itself could lead to certain generalisations, one of the two important results of proper statistical tests on chosen groups was on the "effect of circulation

on weight loss". Figure 1 (ibid: 92) illustrates the formula: the greater the period of circulation = wider the variation of weight of coins minted together.

The formulation was tested in various ways, including checking the scale of variance with modern coins collected from heterogeneous sources in Pune market areas. An example of how it could relate to circulation history of old coins would be, in the context of the older Taxila hoard, the following statement:

Discarding these increases [in] the loss of weight slightly, so that 0.2 grains per mark is not an excessive estimate..... the oldest coins of this hoard are 25 reverse marks old, and at 12 years per reverse mark go back to 600 BC or earlier. Coins with at least 20 reverse marks are actually found [Kosambi 1984: 122].

The second result came in the form of estimates about the "absorption rate" of coins in circulation. The principle, as explained, is simple (ibid: 150):

Coins of a group tend to disappear from circulation in a regular way that is proportionate to the number circulating, provided that the rate of disappearance is not affected by some abnormal situation. The rate of absorption is represented by a statistical law - the same law that applies in the familiar geometric progression (2, 4, 8, 16 and so on). This is also the law of absorption in radiation, the simplest law of biological mortality, the law for the healing rate of wounds and the law of growth by compound interest.2

Applying this to his test case, the older Taxila hoard, Kosambi found that, as reflected in the curves of weight loss and absorption of the coinage, the absorption indicated regularity of circulation, in addition to it being proportionate to the increase in the number of reverse marks.

Textual Testimony

To return to the point raised earlier about Kosambi's use of textual testimony as additional evidence, two specific areas may be chosen. One bore upon the much-discussed question of the exact weight standard followed in standard punchmarked coins. Since the basic unit of weight is that of 'Krsnala' or 'Raktika' (rati) seed (Abrus precatorius), the convention had been to calculate - and Kosambi largely blames Alexander Cunningham's legacy for this - from a number of seeds the average weight of a raktika and multiply it according to the required standard, i e, 32 raktikas. While

Kosambi examined relevant texts bearing on these early issues, his commonsense approach was to observe the current practice:

... 'present practice' is based on the fact that an honest goldsmith or jeweller will choose his seeds to conform to the measure of 96 per tola (180 or 183.75 gr). I submit the opinion that the rati was not used, even in ancient times, to weigh the coins, but rather the coins determined the choice of the seed, exactly as at present [Kosambi 1984: 30].

His own examination of a number of the seeds and of coins from the point of view of statistical calculation led him to conclude: "...the coins could never have been weighed against 32 raktika taken at random, because the variances would then have been ten times the maximum now observed in any reasonably large sample" (ibid: 31). The implication is that the weight of a group of coins to be

> minted had to have a measure of internal uniformity according to a predetermined standard: too much variation would not be normal. Derivations from it in the form

> tion of the coins. Invoking textual evidence was necessary for two reasons. One, the major group in the older Taxila hoard, being of a regular series, was taken to

> of wide initial variance would derive from their specific historical contexts. The other matter where textual testimony was considered particularly unavoidable was in specific dynastic attribu-

represent stable dynastic succession and the only region which "qualified", in terms of an unbroken chain over a long period, was Magadha in south Bihar. Secondly, both the internal and the external evidence pointing to the composition of the hoard spanned a period between the 6th and the beginning of the 4th century BC. Kosambi looked for an explanation, through Pali and Sanskrit-Puranic texts, of the common obverse symbols on the punchmarked coins of the hoard. The five symbols were taken each to have a specific meaning, "decoded" with reference to the texts, and the coins, found in large concentration in the east, were specifically attributed to dynasties and rulers from the time of the Sisunagas to that of the pre-Mauryan Nandas in the 4th century BC.3

Curve I represents minted weight distribution; curve II represents the lowered mean weight and increased variance after circulation; curve

III represents the heavier half of the weight distribution after further

Figure 1: Effect of Circulation on Weight

One may now attempt a brief overview of Kosambi's reconstruction of the history of early coins in India and of history from coins. Kosambi examined four groups of metallic pieces and jewellery in a silver vase, found, during excavations in Mohenjodaro in 1926 [Kosambi 1984: 85-94]. What was remarkable about the find was its heterogeneous composition, and of the presence of cuneiform marks. Of the four classes, class 4 consisting of three pieces, seemed to correspond to the Indus weight system, and "if there be any 'precursors' of the punchmarked coins in the pieces...it can be only these...the weights belong approximately to the Indus class D". Real coinage, however, came about much later. The intermediary stage was that of the traders who started putting their marks on the blank pieces, comparable to the marks on the Persian 'siglos', and it was "not later than the 6th century BC the ksatriya steps in as the king who claims the royal prerogative of stamping his own on the coins". Further, the presence of reverse marks, similar to those on

Persian siglos, on punch-marked coins of the Taxila hoard, is attributed to their having circulated in the north-western region, despite the coins themselves having originated in eastern India.

Further, the simultaneous currency of several series is envisaged: The heavy "bent bar" coins of the Taxila area, not found outside the zone, the Magadhan punchmarked coins which constituted the major group in the Taxila hoard, the lighter-weight series of Kosala of the Paila hoard and so on. PM coins were succeeded by other series. However, the continuity of the coins as exchange-credible in later centuries is suggested on the basis of both hoard study and modern parallels where very old pieces have been found acceptable in a "mix" of metallic currency. In the case of the PM coins the longevity of the series in post-Kosambi archaeological study is confirmed not only by the evidence of their being manufactured locally in the early Christian era but also by stray casers of coins with legend, manufactured by the casting technique again sometime in the early Christian centuries.

Clues from History

Clues connected with history from coins are found throughout Kosambi's writings on punchmarked coins. Two concrete cases may be cited. One was offered by the contrast between two Taxila hoards. The coins of the later hoard contrasted with the earlier not simply in terms of chronology: both stratigraphy and the presence of a coin of Diodotus I, Indo-Greek ruler of the middle of the 3rd century BC as well as symbols assignable to the Mauryas, dated the coins to the Maurya period. What was significant was the nature of the Mauryan coins themselves. The initial variation between

individual pieces was large, and the coins were adulterated in the sense of being heavily alloyed. This was a puzzle in the context of the largest empire in Indian antiquity, and in resolving this puzzle and in order to find a parallel Kosambi examined a large number of coins in circulation in 1940-41 when too currency was debased and "the legal remedy had been abandoned" (ibid 154-55). The explanation then was that like the British empire during the second world war, the Mauryans too experienced a heavy shortage of currency. This was indicative of various pressures on the huge empire, leading ultimately to the decline of its structure. Allied to this was the destruction of the local economy of Taxila. While the pre-Mauryan hoard suggests greater uniformity and regularity in circulation and exchange; the absorption of the region into a system of rigid bureaucratic control under the Mauryas spelt its doom.

The other historical deduction related to a much later period, i e, the period after the middle of the first millennium AD. Kosambi pointed to the contrast – the contrast being a theme of much empirical work by later scholars – between the abundance of coins in circulation up to the Gupta period and its paucity afterwards. This contrast is accounted for by a major change in economy, acquiring more and more the character of a feudal economy [Kosambi 1956: 168-69]. "The self-contained village was hereafter the norm of production. Taxes had to be collected in kind, for there was not enough to allow their conversion into cash."

The considerable amount of research following that of Kosambi on pre-Mauryan, Mauryan and later periods may or may not invalidate Kosambi's specific deduction that he dared to make in the barren field of numismatics, single-handedly and with as

Economic & Political weekly EPW JULY 26, 2008

much care for empirical details as he devoted to other fields of his academic pursuit.

3

Kosambi's off-cited emphatic statement: "...every hoard of coins bears the signature of its society" (ibid: 174) reiterates a point made in his other writings too of the urgency of looking at coins not simply as objects of numismatists' or collectors' curiosity but in the context of when they were produced and the way they circulated. How important coins are in distinguishing between stages in history is a point used by him in his critical review [Kosambi 2005] of a volume edited by R C Majumdar in the *History and Culture of the Indian People Series*, which, even when it describes the beginning of Imperial history and of the historical period does not mention at all the beginning and the nature of metallic currency in India. There may be debate about the ways in which historians, including Kosambi himself, have used coins as markers of socio-economic change, but there is hardly any historian any more to ignore numismatic evidence altogether for societal history.

Numismatic studies have changed considerably over the years from amateurish (including among the professionals) handling of coins and initial explorations into quantitative techniques, although it would be impossible to establish any direct connection between Kosambi's writings and the new numismatic historiography. One can, however, in retrospect only recall what Kosambi wrote, as a plea to future numismatists, in 1941-42:

As dated hoards are rare enough, and yet provide the only method of studying our punch-marked coins, I suggest that our numismatists and treasure trove officers pay more attention to numbers and weight, before and after cleaning. This does not mean that hereafter an archaeologist must also know statistics; an acquaintance with the elements of arithmetic and proof-reading will do [Kosambi 1984: 77].

Greater precision in documentation, and emphasis on full documentation and not in piecemeal, as a first step toward meaningful analysis are needs felt by all numismatists now without distinction, although coins continue to disappear before documentation can begin.

What is inevitable with progress in knowledge, some of the major assertions of Kosambi present in his different writings, are proving to be replaceable. It seems today quite surprising that despite his knowledgeable accent on the growing importance of archaeology and archaeological stratigraphy, Kosambi did not

consider it worthwhile to modify his chronological estimate about the emergence of metallic currency in India from the early 1960s onward. After all, the first systematic statement of the archaeological position of a mean date somewhere between 6th and 4th centuries BC had already been published in the 1950s [Ray 1959] and then regularly. Kosambi, for reasons not known, did not comment on the implications of this statement in his later notes.

His other major finding, namely, that there is a positive correlation between increasing weight loss and increase in the number of reverse marks with progress in circulation, may require some modification. A fresh examination of coins, in the collection of the British Museum, apparently of the same series but not of the same hoard, is claimed to have shown that the correlation was not always positive [Susmita Basu Majumdar nd]. Even granting that the marks were put by bankers or shroffs and that they suggested some kind of monitoring, the possibility that a mark, already present on a coin, may have been recognised and made putting another mark redundant for the time, cannot be altogether ignored. A similar possibility would exist for the presence of a substantial number of marks. Thus there would be every likelihood that the number of reverse marks would not be exactly proportional to the period of circulation of the coin or duration of a coin during the process of its circulation, perhaps suggesting an impossible task that one should try and work out the circulation history of each coin in a group.

Kosambi's other major point, which concerned his calculation of the rate of absorption of a certain number of coins during circulation, may call for a different strategy of calculation in a different context. For example, in a different historical situation – in the Tomara-Cahamana period in early medieval Delhi – it has been assumed, on the basis of a hoard study, that "Bull and Horseman" type coins were issued continuously from c AD 1120 to 1193; and, further, that the rate of production was constant. Given these conditions and the high velocity of circulation due to prevailing circumstances, the rate of absorption too was quite high, the "half-life" or survival rate of coins being approximately 20 years [Deyell 1990: 172-74].

Suggestions of new possibilities or the new estimates only point to the enduring value of the pioneering work; they demonstrate that we need to turn to Kosambi not for the finality of his pronouncements but for pointing out that we need to think differently and prepare a new agenda for examining material from the past, be they coins or relics of a different nature, if necessary by turning our perspective upside down.

NOTES

- In his essay on Bodenayakkanur hoard Kosambi wrote about cleaning the majority of its coins: "The process consisted of soaking overnight (or longer if necessary) in a 10 per cent solution of formic acid, washing in pure water, and scrubbing carefully with a soft toothbrush. The museum chemist's [at Madras] cleaning was more thorough than mine, and he coated the cleaned specimen with celluloid varnish.", Kosambi 1984, p 124.
- 2 Kosambi (1984), Essay No 4 in particular: 'On the Study and Metrology of Silver Punchmarked Coins', pp 14-80.
- 3 Kosambi (1984); for a summing up see Kosambi (1956).

REFERENCES

Allan, John (1936): Catalogue of the Coins of Ancient India (in the British Museum), London.

- Altekar, A S (1927): Catalogue of Gold Coins in the Bayana Hoard, Bombay.
- Cunningham, A (1891): Coins of Ancient India from the Earliest Times to Down to the Seventh Century, London.
- Deyell, John S (1990): Living without Silver: The Monetary History of Early Medieval North India, Oxford University Press, New Delhi.
- Gupta, P L (1963): The Amaravati Hoard of Silver Punchmarked Coins, Hyderabad.
- Kosambi, D D (1956): An Introduction to the Study of Indian History, Bombay.
 - (1984): Indian Numismatics (Introduction by BD Chattopadhyaya), Orient Longman, Hyderabad, reprinted 1991.
 - (1986): 'Steps in Science' in Science, Society and Peace, collection of papers brought out by Academy of Political and Social Studies, Pune, 1986.

- (2005): 'What Constitutes Indian History' in Combined Methods in Indology and Other Writings, compiled, edited and introduced by Brajadulal Chattopadhyaya, Oxford Paperbacks.
- Majumdar, Susmita Basu (nd): 'Kosambi and Scientific Numismatics', mimeo.
- Memoirs of the Archaeological Survey of India (1939): No 59, Calcutta.
- Rapson, E J (1898): Indian Coins, Strassburg.
- (1908): Catalogue of the Coins of the Andhra Dynasty, the Western Kshatrapas, the Traikutaka Dynasty and the Bodhi Dynasty, London.
- Ray, S C (1959): Stratigraphic Evidence of Coins in Indian Excavations and Allied Issues, Varanasi.
- Smith, V A (1906): Catalogue of the Coins in the Indian Museum, Calcutta, including the Cabinet of the Asiatic Society of Bengal, Vol I, Oxford.

Science Is the Cognition of Necessity

VIVEK MONTEIRO

Damodar Dharmanand Kosambi, eminent mathematician and Marxist historian, wrote extensively on the development of science and its use. He focused on the Marxist understanding of science as having an all-encompassing and universal role in engaging with reality. Marxism provided Kosambi with the tools to write on a variety of subjects such as the use of atomic energy, "science and religion" and the need for alternative technology for energy (solar power).

sufficient to secure him a place in the history of thought. It is as profound as it is brief: "Science is the cognition of necessity". D D Kosambi certainly realised the significance and power of his definition. In his essays on science and society, which are reviewed in this article, he repeatedly refers to and develops this theme. A critical assessment of these writings requires a prior consideration of the question of the relation of Marxism to science which we discuss briefly in the following.

The concept of "necessity" as a category for understanding

D Kosambi's classic definition of "science" is by itself

The concept of "necessity" as a category for understanding reality is not new. In the fifth century BC, the Greek materialist philosopher Democritus, with incredible foresight, writes: "Everything existing in the universe is the fruit of chance and necessity".

But, a 100 years later, Aristotle found this assertion unacceptable, and wrote disapprovingly: "Democritus, however, neglecting the final cause, reduces to necessity all the operations of nature" [Generation of Animals V 8]. For more than two millennia thereafter, Aristotelian conceptions continued as the dominant ideas in western science and philosophy. The Democritan insight, though dormant, was far from dead. In fact with the progress of science, it was slowly awakening.

Marxism was a major breakthrough in the history of science. Neither Marx nor Engels were born as Marxists. They arrived at what we today term Marxism, through a process of activism, study and criticism, culminating in Marx's pathbreaking *Theses on Feuerbach* of 1845. Here Marx asserts that social change is also a subject within the purview of science and outlines in brief compass what it means to take up scientifically the problem of human action to change society. The year 1845 is thus a milestone in the history of science. It was in this year too that Marx and Engels enunciated the "materialist conception of history" in their seminal *The German Ideology*:

We know only a single science, the science of history. One can look at history from two sides and divide it into the history of nature and the history of men. The two sides are, however, inseparable; the history of nature and the history of men are dependent on each other so long as men exist. The history of nature, called natural science, does not concern us here; but we will have to examine the history of men, since almost the whole ideology amounts either to a distorted conception of this history or to a complete abstraction from it.

Understanding "necessity" as manifested in a historical context—"historical science", or a "materialist conception of history" (the science of history referred to in the previous paragraph), does not begin with social science, or with Marx. It has its origins in the philosophical and scientific debates of the late 18th and early 19th centuries in which developments in the natural sciences were most important. The reconstruction of biology as a historical science had begun well before Charles Darwin (whose *Origin of Species*

Vivek Monteiro (vivekmonteiro@yahoo.com) is a trade unionist who was trained as a theoretical physicist. He is currently a secretary of the Centre of Indian Trade Unions, Maharashtra.

was published only in 1859). In the preceding century it was becoming increasingly clear that two sciences – geology, and biology, could only be rationally understood as historical sciences. The fossil record, where geology and biology met, made up the pages of a history book, with a strong thread of causation linking the later pages of this book to the earlier ones.

This chain of causation strengthened the claims of the materialists. Developments in astronomy had already shown the irrelevance of divine intervention to explain the motions of the planets around the sun. In the battle between the religious establishment and the new scientific understandings in various areas of natural science, the religious establishments had to repeatedly retreat from the areas under debate. By the early 19th century, through the works of geologists like James Hutton and Charles Lyell, and biologists like Leclerc (Buffon) and Lamarck, it was being asserted that all of nature had a history, that this history could be understood, and that moreover, human beings, as a biological species were a product of this natural history. The threads of necessity running through natural science in the form of natural history were becoming increasingly evident. Natural science was taking shape as a programme of cognising this necessity. But what about human activity and social history?

What Engels writes many years later in his preface to *Anti-Duhring*, serves as a succinct description of the state of intellectual affairs at the turning point when Marx and Engels made their breakthrough to bring social change into the agenda of modern science.

Marx and I were pretty well the only people to rescue conscious dialectics from German idealist philosophy and apply it in the materialist conception of nature and history...

...Feuerbach is quite correct in asserting that exclusively naturalscientific materialism is indeed "the foundation of the edifice of human knowledge, but not the edifice itself". For we live not only in nature but also in human society, and this also no less than nature has its history of development and its science. It was therefore a question of bringing the science of society, that is, the sum total of the so-called historical and philosophical sciences, into harmony with the materialist foundation, and of reconstructing it thereupon. But it did not fall to Feuerbach's lot to do this.

Their contribution was to show how human social history could be incorporated into the agenda of rigorous science. Human social history presents a new problem – understanding human activity. Human societies too show regularities, have laws, but these laws are fundamentally different from the laws of nature which cannot be changed, and are only to be discovered. The laws governing human action are not only biological but also social. Social laws are made and can be changed by conscious human action. In natural science the theory does not and cannot change the phenomenon. But social theory "can grip the masses" and change the very reality being studied. Human beings can act consciously, have freedom to choose. How can this freedom of choice be reconciled with the aspect of necessity that is central to all scientific analysis?

Engels expresses how in *Anti-Duhring*, ..."freedom does not consist of any dreamt-of independence from natural laws, but in knowledge of these laws, and in the possibility this gives of systematically making them work towards definite ends".

He quotes Hegel: "Freedom is the insight into necessity – necessity is blind only in so far as it is not understood" and then adds: "Freedom of the will therefore means nothing but the capacity to make decisions with knowledge of the subject. Therefore the freer a man's judgment is in relation to a definite question, the greater is the necessity with which the content of this judgment will be determined".

But comprehending "necessity" in the context of society is more complex than in nature. There is the realm of the objective, the inevitable, what necessarily must happen, what is compelled by underlying conditions – and there is also the realm of the subjective, the desirable, the possible, the needs of human beings. Marx's brilliant "Theses on Feuerbach" shows how this is to be done, taking both the objective and the subjective into account.

Marx thus completes what Democritus had only asserted, with astonishing insight, 2,300 years earlier. After Marx's 1845 breakthrough, for the first time in human history, all of reality, both natural and social, becomes a subject of rigorous scientific inquiry.

With all of reality becoming the subject of science, science itself ceases to be a subject, and instead becomes a method for understanding and engaging with reality. Kosambi's great achievement is to give a definition of science which can properly encompass this new comprehensive, universal role.

Science and Freedom

Kosambi examines the implications of his definition for the development of science itself in his article 'Science and Freedom', written for *Monthly Review* in 1952, and which is the most important of his essays on science. As Marx and Engels had done a century earlier in their 1845 writings, Kosambi begins by critiquing an abstract concept of "freedom", now as professed by the bourgeois western scientists. He begins by taking on the intellectual dishonesty of a section of the American scientists who while themselves actively participating in the research activities of the us war machine, developing more and more lethal thermonuclear weapons, also would write profusely about intellectual freedom and its absence in "totalitarian" societies.

In 1949, I saw that American scientists and intellectuals were greatly worried about the question of scientific freedom, meaning thereby freedom for the scientist to do what he liked while being paid by big business, war departments, or universities whose funds tended to come more and more from one or the other source. These gentlemen, living in a society where he who pays the piper insists upon calling the tune, did not seem to realise that science was no longer "independent" ... The scientist now is part of a far more closely integrated, tightly exploited, social system; he lives much more comfortably than Faraday, but at the same time under the necessity of producing regular output of patentable or advertising value, while avoiding all dangerous social or philosophical ideas. As a result, the worthies I mention were quite worried about the lack of scientific freedom in a planned society, but only indirectly and perhaps subconsciously as to what was actually happening to their own freedom in an age and time of extensive witchhunting, where being called a communist was far more dangerous than being caught red-handed in a fraud or robbery.

There is an intimate connection between science and freedom, the individual freedom of the scientist being only a small corollary. *Freedom is the recognition of necessity; science is the cognition of necessity.* The first is the classical Marxist definition of freedom, to which I have added my own definition of science. Let us look closer into the implications. (emphasis in original)

A scientist while performing his professional tasks of understanding the necessities of nature – nature's laws – is also governed by other aspects of necessity:

...in addition, there is a technical level, which cannot be divorced from the experimental. Finally, there is a social structure that is not only intimately connected with the technical level, but also conditions the freedom of the individual by introducing a social necessity that in the abstract seems unnecessary but exists nevertheless...

What most of us do not realise is that science is also a social development; that the scientific method is not eternal and that science came into being only when the new class structure of society made it necessary. Of course, science really comes into its own with the machine age, which cannot develop without science and which in turn contributes highly useful technical aid to scientific discovery... Modern science is the creation of the bourgeoisie. (emphasis in original)

Kosambi then argues that not only technical necessity, but social necessity also is a powerful impetus to new science, it is not at all accidental that Newton, Lagrange, Laplace, Ampere, Berthelot and Gauss appear on the scene at the same time that the English, French and German bourgeoisie come into their own. The point of this essay is that,

There is no reason for science to remain bound any longer to the decaying class that brought it into existence four centuries ago. The scientist needs this freedom most of all, namely freedom from servitude to a particular class. Only in science planned for the benefit of all mankind, not for bacteriological, atomic, psychological or other mass warfare can the scientist really be free... But if he serves the class that grows food scientifically and then dumps it in the ocean while millions starve all over the world, if he believes that the world is overpopulated and the atom bomb is a blessing that will perpetuate his own comfort, he is moving in a retrograde orbit, on a level no beast could achieve, a level below that of a witch doctor

Kosambi concludes this essay with the question: "After all, how does science analyse necessity?" to which he answers:

In the final analysis, science acts by changing its scene of activity... There is no science without change...The real task is to change society, to turn the light of scientific inquiry upon the foundations of social structure. Are classes necessary, and in particular, what is the necessity of the bourgeoisie now? But it is precisely from cognition of this great problem of the day that the scientist is barred if a small class should happen to rule his country.

The last sentence is incongruous as coming from a Marxist scientist. We discuss this point at the end of this article.

The theme that the growth of the sciences in any society is conditioned by the kind of society in which this growth takes place is examined in other contexts like socialism and fascism by Kosambi in his essays: 'Revolution and the Progress of Science', written for *New Age*, 'Soviet Science: What It Can Teach Us' (*Indo-Soviet Journal 1944*) and in his review of Bernal's *The Social Function of Science* (1940). Space does not permit a detailed discussion of these essays. However, comments about science in India made in the Bernal book review deserve mention.

Kosambi quotes with approval the following excerpt from Bernal's book:

...there is hardly any country in the world that needs the application of science more than India. In order to release the enormous potentialities for scientific development in the Indian people, it would be necessary to transform them into a free and self-reliant community. Probably the

best workers for Indian science today are not the scientists but the political agitators who are struggling towards this end. (emphasis in original)

Kosambi follows this with scathing comments on the sycophant science as it then existed in British India:

After this fair appraisal it would be our duty to say a few of the things that the author has left out for lack of space, or of malice. The research work today in this country is confined to the universities and to a few special institutions, controlled by and often actually worked by people who know nothing of science. Though it is no longer the custom to shove all the fat jobs of the educational system to one side for third rate Englishmen who cannot be accommodated in their own country, the mark of the beast has by no means been eradicated. The men who occupy the key posts have obtained them by other means than research ability, usually by pure charlatanism, bootlicking, and politics of the most decadent sort within academic circles...Under these circumstances, it is not surprising that the Indian "professor" was a parasite on the already parasitic official services, assiduous only in licking the boots that seemed capable of kicking him the hardest, reactionary in politics, and proud at best of having helped some of his students to the supreme bliss of admission into the Indian Civil Service. Research was a difficult proposition for such people. (...)

Writing two decades later, in an autobiographical essay 'Steps in Science', Kosambi's views on the Indian science establishment had not changed much.

The greatest obstacles to research in any backward, underdeveloped country are often those needlessly created by the scientist's or scholar's fellow citizens. Grit may be essential in some difficult investigation, but the paying commodity is soft soap. The meretricious ability to please the right people, a convincing pose, masterly charlatanism and a clever press agent are indispensable for success. The Byzantine emperor Nikephoros Phokas assured himself of ample notice from superficial observers, at someone else's expense, by setting up in his own name at a strategic site in the Roman Forum, a column stolen from some grandiose temple. Many of our eminent intellectuals have mastered this technique.

There is little point in discussing personal experience of the scum that naturally floats to the top in a stagnant class.

Science for Developing Countries

The paragraph just quoted is typical of Kosambi's style. His language is direct. His purpose in writing is to call a spade a spade unmindful of the consequences. At a time when being a communist was surely a career liability, he did not hesitate to write for *New Age* and other left wing journals. Even in international conferences he was never averse to making a political statement when he thought it was necessary. In an address before an international conference of scientists on "Problems of Science and Technology in the Developing Countries" in 1964, he has this to say:

The political situation is all-important. Most underdeveloped countries have been under foreign domination for a long time. That is, in fact, the primary reason for their being underdeveloped. So, freedom must come first. We cannot speak of science and technology for Angola and Mozambique, for example. The South African situation is even more complex. The land has a few outstanding technological developments; their laboratories and engineering works are by no means to be despised. But the real Africans are not even citizens in South Africa, which remains for them underdeveloped, while being in a quite satisfactory stage of development for property-owing whites and for the investors in London who stand back of them... In such cases,

we have no solution to offer, for our conference restricts itself to science and technology.

The lack of resources is fortunately not present in all countries. Several Arab lands have discovered in oil and natural gas a commodity, which can be exploited sufficiently well to solve their economic problems. However, whether the oil and other resources are properly used or not depends once again on the context. First, the foreigner must not take away the lion's share, as happened in Iran for so many years. Secondly, those in power must feel the need for developing the country rather than for building palaces for their own families and living a life of Arabian Nights style. This remains, therefore, again an internal political matter, namely who plans and for whose advantage. It is not sufficient to announce grandiose plans; one has to convince the people that they stand to gain and to secure popular support. Developments in Ghana and Indonesia show what happens otherwise. Going deeper into this question but that (sic) would cause unpleasantness.

However, we reach one important principle here: underdeveloped countries need a planned course of development, which necessarily implies a planned economy (emphasis in original). Merely admitting this principle is not enough. The context once again thrusts itself upon your attention: who does the planning, and for whose real advantage? The solution generally offered is to invite foreign experts to offer advice and draw up schemes. With the best will in the world, this will not succeed. The foreign expert has been used to planning for an entirely different purpose, in totally different surroundings. He pays little attention to local needs during the course of development. Oftener than not, the foreign expert is interested in selling the products of some companies with which he might be connected.

Here, we could learn a good deal from Chinese experience, were it not for the political problem, once again, which makes it impossible to secure cooperation from that great country at such a meeting.

Hitherto, I have only pointed out the difficulties without suggesting a solution. As a matter of fact, I hold very strong views on the proper political structure and the correct foreign policy for underdeveloped countries; but this is not the time not the place to a develop those views... The scientific approach, on the other hand, tends to be rather vacuous and devoid of application unless these primary difficulties are solved.

Atomic Energy

The issue of atomic energy is a recurrent theme in Kosambi's writings, in the context of peace and disarmament, as well as in discussions on energy policy for India and other developing countries. Typically, Kosambi is both critical and outspoken on the issue of atomic energy. In his articles and talks he repeatedly points out that in discussions on the relative cost of atomic energy, the real cost is usually ignored, suppressed or hidden. Giving a popular lecture to the Rotary Club in Pune, in 1960, Kosambi says:

The main question that most of you will ask is: What is the investment value of atomic energy? If the preliminary research and refining is to be done, there is virtually no investment value, for the private sector. The whole affair is fantastically costly. Those who say that atomic energy can compete with thermal or hydro-power, carefully omit to mention the fact that the preliminary costs have always been written off to someone else's account, usually that of some government. Only in some socialist countries, where uranium is relatively plentiful, and new lands have to be opened up, is it possible to utilise atomic energy properly. Even there, military considerations play a considerable part, because of the cold war.

At the international conference on science in the underdeveloped countries referred to earlier, he does some blunt speaking:

For example, many of you here are bound to be impressed by India's advance in science and may even persuade your own governments to copy us. But in what particulars? We have top class physicists, for example,

our department of atomic energy is spending several hundred millions a year on an imposing establishment. But how much atomic energy is this country actually producing? The plant that should have been in commission in 1964 will not be operating till 1968 at the earliest. The delay has passed without criticism, while some politicians demand that we should produce the A-bomb to put us on at par with the big powers. In effect, the establishment we have was built by foreign "experts", is outdated already, and will produce atomic power if run as designed which is costlier than such power elsewhere and costlier than conventional power in India. Even then, all the basic cost will have been off under the heading of "research" (Science, or some such beautiful title).

Energy cost is something that can be rationally calculated. The cost of private sector nuclear power plants proposed to be imported in consequence of the Indo-us 123 nuclear deal has been estimated by technical experts from the left as approximately Rs 12 crore per MW installed, which is three times the present cost of conventional power plants. The proponents of imported nuclear power from the establishment have neither refuted this calculation, nor have they argued why such expensive power is necessary and how it is affordable. This straightforward but critical question which should be central to any debate on the 123 agreement has been effectively censored from mainstream media discourse. On this and many other straightforward technical/scientific issues pertinent to the Indo-us nuclear deal the Indian science establishment also has been typically silent and characteristically timid (as it was on the Enron issue), with some notable exemptions including a few retired senior scientists.

A logical discussion about India's needs for affordable energy leads inexorably to the conclusion the Indo-us nuclear deal is less about electric power and more about politics. Kosambi's writings on issues of science and technology in an age of us Imperialism are still topical, though nearly 50 years have elapsed since they were written. In an article for *Monthly Review* written in 1951, he gives a masterly analysis of what he terms the "crooked roots" and "crazy logic" of imperialism.

The crooked roots of imperialism lie deep in the need for profits and ever more profits for the benefit of a few monopolists. The "American way of life" did not solve the world problem of the great depression of 1929-33. In the us this was solved by second world war. But only for a short time. Korea shows that the next step is to start a new war to stave off another depression. The one lesson of the last depression, which stuck, is that profits can be kept up by creating shortages where they do not and need not exist. War materials are produced for destruction. Producing them restricts consumer goods, which increases profits in double ratio. Any logic that proves the necessity of war is the correct logic for imperialism and for big business, which now go hand in hand. Mere contradictions do not matter for this sort of lunatic thinking where production of food is no longer the method of raising man above the animals, but merely a way of making profit while millions starve.

Destroying stockpiles of food is the same kind of action as building up stockpiles of atom bomb. But the war waged by means of food is different in one very important respect from national and colonial aggression. It is war against the whole of humanity except that tiny portion to whom food is a negligibly small item of expenditure, war also against millions of American workers. In a word, it is class war, and all other wars of today stem from attempts to turn it outward. Even the Romans knew that the safest way to avoid inner conflict, to quiet the demands of their own citizens, was to attempt new conquests.

Quite apart from the destructiveness of total war, the crooked logic of big business and warmongers is fatal to the clear thinking needed for science. The arguments that modem science originates with the bourgeoisie, that the enormous funds devoted to war research are a great stimulus to science are vicious. The scientific outlook came into being when the bourgeoisie was a new progressive class, struggling for power against feudal and clerical reaction.

But for modern capitalists, a class in decay, the findings of science (apart from profit-making techniques) have become dangerous; and so it becomes necessary for them to coerce the scientist to restrict his activity. That is one reason for vast expenditure on secret atomic research, for putting third-raters in control to bring big business monopoly to the laboratory. The broad cooperation and pooling of knowledge, which made scientific progress so rapid, is destroyed... Science cannot flourish behind barbed wire; no matter how much money the war offices may pay to "loyal" mediocrity. Freedom is the recognition of necessity; science is the investigation, the analysis, and the cognition of necessity. Science and freedom always march together. The war mentality, which destroys freedom, must necessarily destroy science.

Solar Energy and Alternative Technology

The better half of Kosambi's address to the Pune Rotary Club on Atomic Energy for India was not about nuclear power plants on earth, but about the nuclear power plant in the heavens, ie, about solar energy. There is an impressive conviction and consistency in Kosambi's essays on this subject. In his characteristic style, issues of basic science, technology, science policy, politics, economics and ideology are seamlessly interwoven in these popular essays, which, if anything are even more relevant today than when they were written. Kosambi repeatedly makes the important point that whether or not an alternate technology is viable is not only a technical question, but also a political and organisational question.

Where does that leave us in India? We do need every available source of power quickly. Can we utilise atomic power for national progress? This question has already been answered in the affirmative by the high command.

The question is whether this cost is worthwhile. I do not propose to answer this question, because all of you here are intelligent to work out the answer for yourselves. But I do wish to point out that the main work in producing atomic energy has already been done without cost to India by a permanent source, which has only to be utilised properly. This generous source is the sun, which goes on pouring its blasting rays into every tropical country, at an uncomfortable rate.

The most important advantage of solar energy would be decentralisation. ... Solar power would be the best available source of energy for dispersed small industry and local use in India. If you really mean to have socialism in any form, without the stifling effects of bureaucracy and heavy initial investment, there is no other source so efficient.

...What India could use best in this way still remains to be determined. The principle involved in the use of atomic energy produced by the sun as against that from atomic piles is parallel to that between small and large dams for irrigation. The large dam is very impressive to look at, but its construction and use mean heavy expenditure in one locality, and bureaucratic administration. The small bunding operation can be done with local labour, stops erosion of the soil, and can be fitted into any corner of the country where there is some rainfall. It solves two fundamental problems: how to keep the rain-water from flowing off rapidly into the sea, unused; and how to encourage local initiative while giving direct economic gain to the small producer. The great dams certainly have their uses, but no planners should neglect proper emphasis upon effective construction of the dispersed small dams. What is involved is not merely agriculture and manufacture, but a direct road to socialism.

Kosambi's comments on research on energy for a country like India are controversial and courageous. His essay 'Sun or Atom' (1957), poses the issue sharply:

In all this, the question of India has naturally to be foremost in our minds. ...Our fissionable materials consist of the lowest grade uranium in central India, plus the radioactive (thorium) sands of Kerala, which are not immediately utilisable for power production. Add thereto the low achievements of our costly but inefficient science and technology, and the problem becomes formidable. All the more so because foreign sources of uranium are controlled, atomic research is everywhere a painfully guarded secret; power politics has entered into the thing else, with new gusto. Is there no other way that would be more paying, without interference with any other mode of power-production? The answer, for India is a definite YES. Instead of competing with the sun, what we have to do is to find some way of utilising what the sun thrusts upon us with matchless persistence. Let the sun split the atom, fuse the nuclei for us. Why should we not use the energy directly rather than wait for it to be absorbed by plants, converted into firewood, and so on?

The cost of research on direct utilisation of solar energy would be far lower than for atomic energy. India has much greater supply of solar energy than most other countries; in fact, the problem is to keep the land from being blasted altogether by the sun. One difficulty is that the sun's energy is not constant.

The advantages are that the fuel – the sun's radiation – costs absolutely nothing, and there are no harmful exhaust gases or radioactive by-products. Moreover, the installation can be set up anywhere in India, and will work quite well except perhaps in the heaviest monsoon season. The research is of no use for war purposes. This is why it attracts some of us, but does not attract those who control the funds.

But the huge primary source of energy today remains the sun. Direct utilisation is hindered only by the desire for prestige, which makes India waste so much of her money in supposed research along other lines.

Writing similarly on the subject of 'Solar Energy for the Underdeveloped Countries' (*Seminar*, September 1964), Kosambi throws a challenge to the future:

These strictures seem rather harsh, but surely not undeserved. When some years ago, the main ideas of this note were spoken out in a popular lecture, the matter roused some heat not due to the sun... Questions were asked in Parliament and answered by high authority with the words that such projects are designed to keep India backward, in the bullock-cart age. This, in spite of the remark made during the lecture that the bullock-cart is inefficient, and that India needs every form of energy it can afford.

A question of science, technology and economics was reduced to one of ostentation and prestige. However, the sun has not yet been abolished by decree, so that the matter may be taken up at some future date when common sense gets a chance.

Science and Religion

Kosambi's essays also include two on the subject of superstition and religion: 'Sin and Science: Introduction' (1950), and 'The Scientific Attitude and Religion' (Seminar, 1964).

In both these essays

some social aspects of religion are considered in so far as they serve to keep India a backward country. The methods of cure suggested are by legislation, education and improved social conditions, with a brief example or two to bring out the basic idea in each case.

One-fourth of the essay of six pages on religion is an argument on how religion is akin to a drug or narcotic, and if alcohol and drugs are taxed and regulated by the state, why then should religion also not be taxed and regulated? Following this is a

discussion on educating people out of superstition and a suggestion that the same almanacs which are the source of many superstitions can also be used to convey scientific information about the weather and seasons which can undermine those superstitions.

The next question taken up in the same essay is about "the most obscurantist of all Indian religious and social institutions, caste. The evils of the caste system are known, but no one asks himself why the system originated, and why it has held on in spite of so great a change in Indian life." Having asked such a fundamental question, it is disposed of by a few observations in less than a page, with the conclusion:

The root cause is the abysmally low economic status of the lowest castes and their total lack of opportunity. Neither legislation, nor conversion, nor schoolroom education can remove this. The sole possible cure is more efficient production and distribution of the product in a manner equitable for all; most people call this socialism.

Coming from the pen of Kosambi, who in his writings on history has made such important contributions to an understanding of religion and caste in Indian history, this kind of sketchy commentary is surprising and disappointing. Any serious Marxist analysis of the role of religion in India would have to take up the problem of communalism. This however finds no mention in the essay. There is no mention of the role of religion in the democratic movements which are so important to the understanding of Indian linguistic, cultural and social history. And looking forward, when religion continues to play such an important role in the consciousness of most Indians, and the need to isolate communalism is of such political importance, when religious and caste organisations continue to play such an important role in mass mobilisation, one is left wondering – surely, as an exercise in Marxism Kosambi would never have written this. Is it that Kosambi understood Marxism as something different

This question is also thrown up by the paragraph, quoted earlier in this article, from the conclusion of 'Science and Freedom'.

This too is disappointing as coming from a Marxist scientist. As a rational and logical conclusion to his analysis, Kosambi ought to have concluded: "The irresistible conclusion of this analysis is that if the scientist must remain true to science, then he must also now become part of the task of changing society, which is a political task."? If "the real task is to change society", then is this not also a scientific task? Can science be only for understanding, and not for practice?

Kosambi ought to have proceeded to analyse the relationship between science and politics: Why a scientist cannot but be political, if he or she must remain true to science, and what does it mean to practise politics in a scientific manner. Scientific politics means organisation. Organisation means working with people. Was it Kosambi's individualism which came in the way of his taking the analysis to its logical conclusion? A discussion of this question is beyond the scope of this article.

The resistance to science today comes not only from traditional quarters like reactionary religion, but also from modern sectors of the conservative ideological establishment. The belief that science must be apolitical, or antipolitical and that politics has no place in science is widespread among professional scientists.

Many scientists take pride in professing their political illiteracy as if this were a necessary consequence of their being scientists. Kosambi would have been the best person to demolish the obfuscation that is at the root of this retreat from science by the "science establishment". But he does not do this, leaving an important unfinished task for those committed to rigorous comprehensive science.

In the eleventh and final Theses on Feuerbach Marx writes "The philosophers have interpreted the world in various ways, the point however is to change it".

In the very first thesis, Marx makes a number of assertions about science (materialism). In science, theory and practice come together (or as Kosambi expressed it in 'Science and Freedom': "In science theory and practice cannot be divorced"). Though science is objective, and conscious human activity subjective, the "subjective" and "objective" cannot be seen as always opposite or mutually exclusive. Conscious human activity is simultaneously subjective and objective. Science is practicalcritical activity. It is not accidental that here Marx uses the word "revolutionary" to describe and qualify the term "practicalcritical" activity.

It must be understood that what Marx is asserting in Theses on Feuerbach is that revolutionary activity is not an external add-on to science, but a necessary consequence. Scientific practice, if it remains critical, realistic, consistent and true to the values of science necessarily becomes revolutionary. Engels expressed it thus: "...the more ruthlessly and disinterestedly science proceeds the more it finds itself in harmony with the interest and aspirations of the workers".

Why has science revolutionised every area that it has entered? It has done so because to progress with rigour it must clear its path of all obfuscation and misconception. Since large-scale misconception is vital to the existence of societies based on the exploitation of the masses, science cannot but be revolutionary, when it takes up social investigation with rigour. Kosambi's thought-provoking essays throw light on a number of subjects and issues which are today even more important than when he wrote about them. His writings are addressed directly to those working on issues of science policy in contemporary India. They fall squarely within the framework of the people's science movement. In fact, they both inspire and challenge all those committed to science to take forward an unfinished agenda. We can add a corollary to Kosambi's definition: "Scientific practice is understanding and doing what is necessary".

Economic&PoliticalWEEKLY

available at

Mythri News Agencies

16/22, 1st Floor, Karnataka Complex Lalbagh Fort Road Bangalore 560 004 Ph: 26707843